





C45X Bird

The Chat

Vol. 63





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THE CHAT

Vol. 63

Editor

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Fall 1997 North American Migration Count in South Carolina

Robin M.Carter 4165 E. Buchanan Drive Columbia, SC 29206

Compiler's Comments

The 1997 Fall North American Migration Count in South Carolina was held on the third Saturday in September (20 September 1997). Some 127 observers in 52 parties found a grand total of 211 species and about 25,689 individual birds in South Carolina. Of these some 43 species were "exclusives," that is, found in only one county. The distribution of exclusives was as follows: 17 exclusives -- Charleston County, 6 exclusives -- Greenville County, 5 exclusives -- Georgetown County, Oconee County, 2 exclusives -- Jasper County, Spartanburg County, and 1 exclusive -- Aiken County, Fairfield County, Horry County, Richland County, Williamsburg County.

Year	No. of counties	No. of species	No. of indivi- duals	party- hours	No. of birders	No. of parties
1995	9	163	15,384	102.5	50	17
1996	15	202	27,253	263.25	82	36
1997	18	211	25,689	450.2	127	52

Summary of the Fall NAMC in South Carolina

Counts were held in 18 of the 46 counties of the state (by geographic region, with county seat):

Coastal and Outer Coastal Plain:

Horry (Conway) Georgetown (Georgetown) Charleston (Charleston)
Jasper (Ridgeland)

Inner Coastal Plain:

Barnwell (Barnwell) Hampton (Hampton) Williamsburg (Kingstree)

Piedmont and Inner Coastal Plain (i.e. Fall Line area):

Aiken (Aiken) Lexington (Lexington) Richland (Columbia)

Piedmont:

Spartanburg (Spartanburg)
Cherokee (Gaffney)
Chester (Chester)
Fairfield (Winnsboro)
Newberry (Newberry)
Edgefield (Edgefield)

Mountains and Piedmont:

Greenville (Greenville) Oconee (Walhalla)

AIKN - Aiken County, SC. (Piedmont and Inner Coastal Plain)

Total: 89 species; 2672 individuals.

6:30 AM to 9:00 PM. Temp. 66° to 99° F. Wind calm. AM clear; PM clear. Regular observers: 14 in field in 5 parties. Total regular party-hours: 34.5; total regular party-miles: 315.5; 14.25 hours and 8 miles on foot; 13.75 hours and 304 miles by car; 6.5 hours and 3.5 miles by boat. Feeders: 4 observers, 3 feeding stations, 5.5 hours watching feeders. Owling observers: 2 in 1 party. Owling party-hours: 0.75; owling party-miles: 19. Totals: 40.75 party-hours; 334.5 party-miles; 14 participants.

Coordinator: Anne Waters, 1621 Apple Valley Drive, Augusta, GA 30906. Participants: Olen Blackmon, Adrienne DeBiase, Chuck Braun, Carol Eldridge, Larry Eldridge, Eulalie Gibbs, Sandra Johnson, Paul Koehler, Richard

Lux, Mike Turner, Anne Waters, Vernon Waters, Caroline White, Calvin Zippler.

Comments: Aiken counters turned in a solid count, but with few rarities. A bit unusual were 2 early Hermit Thrushes.

BNWL - Barnwell County, SC. (Inner Coastal Plain)

Total: 51 species; 315 individuals.

7:30 AM to 1:30 PM. Temp. 78° to 98° F. Wind calm. AM clear; PM clear. Regular observers: 2 in field in 1 party. Total regular party-hours: 6; total regular party-miles: 88; 3 hours and 2 miles on foot; 3 hours and 86 miles by car. Totals: 6 party-hours; 88 party-miles; 2 participants.

Coordinator: Teddy Shuler, 433 Sheraton Drive, Beech Island, SC 29841-5514.

Participants: Ned Shuler, Teddy Shuler.

Comments: No unusual species were reported from Barnwell County.

CHSTN - Charleston County, SC. (Coastal and Outer Coastal Plain)

Total: 142 species; 6879 individuals.

5:00 AM to 8:00 PM. Temp. 66° to 90° F. Wind SW, 0 to 10 mph. AM partly cloudy; PM clear.

Regular observers: 15 in field in 6 parties. Total regular party-hours: 52.5; total regular party-miles: 319; 27 hours and 22 miles on foot; 23 hours and 294 miles by car; 2.5 hours and 3 miles by bike. Feeders: 7 observers, 11 feeding stations, 10 hours watching feeders. Owling observers: 1 in 1 party; owling party-hours: 2; owling party-miles: 1. Totals: 64.5 party-hours; 320 party-miles; 15 participants.

Coordinator: Perry Nugent, 2260 Dallerton Circle, Charleston, SC 29414. Participants: Van Atkins, Sharon Brown, George Crumley, Janice Fanning, Dennis Forsythe, Donna Forsythe, Nancy Fuller, Fernanda Hastie, Ann Kent, Perry Nugent, Ben Smith, Liz Smylie, Joe Stevenot, Martha Stevenot, Charles Walters.

Comments: As usual, Perry Nugent and the Charleston County migration counters held a well-organized and productive count. They did especially well on migrant thrushes this fall, reporting 16 Veeries, 7 Gray-cheeked Thrushes, 1 Bicknell's Thrush, 3 Swainson's Thrushes, but no American Robins. Some 18 species of warblers were reported, an excellent count for a coastal county.

CHKE - Cherokee County, SC. (Piedmont)

Total: 48 species; 525 individuals.

Temp. 63° to 93° F. Wind W to NE, 0 to 11 mph. AM clear; PM clear. Regular observers: 4 in field in 1 party. Total regular party-hours: 5; total regular party-miles: 27; 2 hours and 3 miles on foot; 3 hours and 25 miles by car. Totals: 5 party-hours; 27 party-miles; 4 participants.

Coordinator: Lyle Campbell, 126 Greengate Lane, Spartanburg, SC 29307.

Participants: Claude Cobb, J.B. Hines, Myra Hines, Ed Wilde.

Comments: No unusual species were reported from Cherokee County.

CHSTR - Chester County, SC. (Piedmont)

Total: 61 species; 592 individuals.

5:00 AM to 7:15 PM. Temp. 69° to 94° F. Wind SW, 5 mph. AM partly cloudy; PM partly cloudy.

Regular observers: 2 in field in 2 parties. Total regular party-hours: 21.75; total regular party-miles: 69; 17.5 hours and 6.5 miles on foot; 1.75 hours and 55.5 miles by car; 2.75 hours and 7 miles by boat. Owling observers: 1 in 1 party; owling party-hours: 2.5; owling party-miles: 7. Totals: 24.25 party-hours; 76 party-miles; 2 participants.

Coordinator: Albert Conway, 1672 Deer Run Road, Catawba, SC 29704. Participants: Albert Conway, Gail B. Ice.

Comments: No unusual species were reported from Chester County. The Barn Owls were Albert Conway's regular stakeout.

EGFD - Edgefield County, SC. (Piedmont)

Total: 28 species; 82 individuals.

11:20 AM to 5:55 PM.

Regular observers: 1 in field in 1 party. Total regular party-hours: 6.5; total regular party-miles: 63; 6.5 hours and 63 miles by car. Totals: 6.5 party-hours; 63 party-miles; 1 participant.

Coordinator and sole particiapnt: Mike Turner, 1131 Shirley St., Columbia, SC 29205.

Comments: No unusual species were reported from Edgefield County.

FFLD - Fairfield County, SC. (Piedmont)

Total: 68 species; 510 individuals.

5:30 AM to 9:30 PM. Temp. 66° to 96° F. Wind W, 0 to 3 mph. AM clear; PM partly cloudy.

Regular observers: 3 in field in 1 party. Total regular party-hours: 13; total regular party-miles: 84.5; 10 hours and 4 miles on foot; 2.5 hours and 80 miles by car; 0.5 hours and 0.5 miles by boat. Owling observers: 2 in 1 party; owling

party-hours: 3; owling party-miles: 0. Totals: 16 party-hours; 84.5 party-miles; 3 participants.

Coordinator: Donna Bailey, Rt. 3, Box 64 FH, Winnsboro, SC 29180.

Participants: Buddy Bailey, Donna Bailey, Lisa Sisk.

Comments: Donna Bailey reported 3 Willow Flycatchers (carefully identified), part of a nice movement of this species through South Carolina this fall.

GTWN - Georgetown County, SC. (Coastal and Outer Coastal Plain)

Total: 80 species; 1733 individuals.

10:30 AM to 6:30 PM. Temp. 83° to 87° F. Wind SE, 5 mph. AM partly cloudy; PM partly cloudy.

Regular observers: 3 in field in 1 party. Total regular party-hours: 10; total regular party-miles: 79; 8 hours and 7 miles on foot; 2 hours and 72 miles by car. Totals: 10 party-hours; 79 party-miles; 3 participants.

Coordinator: Jack Peachey, 103 Walnut Circle, Conway, SC 29526.

Participants: David Donmoyer, Jack Peachey, Tonya Spires.

Comments: Counters in Georgetown County turned up a couple of somewhat late kites -- a Swallow-tailed Kite and a Mississippi Kite, nice finds on an otherwise rather ordinary count day.

GRVL - **Greenville County**, **SC**. (Mountains and Piedmont)

Total: 101 species; 3461 individuals.

Temp. 68° to 93° F. Wind NW, 5 mph. AM partly cloudy; PM partly cloudy.

Regular observers: 15 in field in 9 parties. Total regular party-hours: 57.5; total regular party-miles: 308; 40 hours and 23 miles on foot; 17.5 hours and 285 miles by car. Feeders: 2 observers, 2 feeding stations, 6 hours watching feeders. Stationary (Caesar's Head Hawk Watch): 2 observers, 1 station, 8 stationary hours. Owling observers: 1 in 1 party; owling party-hours: 1; owling party-miles: 2. Totals: 72.5 party-hours; 310 party-miles; 15 participants.

Coordinator: Peter Worthington, 716 North Almond Drive, Simpsonville, SC 29681-3452.

Participants: Alan Amason, Karen Amason, Phil Blue, Sandy Blue, Randy Cecil, Don Cox, Dana Harris, Stephen Harris, Sue Lessner, Eric McFalls, Bill Murell, Irv Pitts, Kyle Rollins, Linda Sharp, Peter Worthington.

Comments: A well-organized count in Greenville County turned in an impressive 101 species, including 20 species of warblers. Another nice touch were 4 Common Ravens, a species to be expected in the mountains near Caesar's Head, but always a good find in South Carolina.

HPTN - Hampton County, SC. (Inner Coastal Plain)

Total: 42 species; 433 individuals.

7:00 AM to 4:50 PM. Temp. 69° to 93° F. Wind calm. AM partly cloudy; PM partly cloudy.

Regular observers: 2 in field in 1 party. Total regular party-hours: 10; total regular party-miles: 127.75; 4.2 hours and 2.75 miles on foot; 5.8 hours and 125 miles by car. Totals: 10 party-hours; 127.75 party-miles; 2 participants.

Coordinator: Carroll Richard, P.O. Box 893, Hampton, SC 29924.

Participants: Karen Breland, Carroll Richard.

Comments: Carroll Richard reported 2 Purple Gallinules from Hampton County, a species to be expected at the Webb Wildlife Center, but always a treat to find anywhere in South Carolina, since this species is apparently in decline. It is getting tough to find even at its stronghold at Savannah National Wildlife Refuge in Jasper County.

HRRY - Horry County, SC. (Coastal and Outer Coastal Plain)

Total: 69 species, 714 individuals.

7:30 AM to 8:15 PM. Temp. 77° to 89° F. Wind SE, 5 mph. AM partly cloudy; PM partly cloudy.

Regular observers: 5 in field in 3 parties. Total regular party-hours: 14.5; total regular party-miles: 145.5; 5.75 hours and 3.5 miles on foot; 8.75 hours and 142 miles by car. Totals: 14.5 party-hours; 145.5 party-miles; 5 participants.

Coordinator: Tonya Spires, P.O. Box 2167, Conway, SC 29526.

Participants: David Donmoyer, Jack Peachey, Tonya Spires, Phil Turner, Sharon Turner.

Comments: Counters in Horry County reported 7 American Golden-Plovers, always a nice find, even at the Bucksport sod farms, as well as a nice total of some 13 Ruby-throated Hummingbirds, quite a few for only 14.5 party-hours of effort.

JSPR - Jasper County, SC. (Coastal and Outer Coastal Plain)

Total: 85 species; 1673 individuals.

7:10 AM to 7:30 PM. Temp. 72° to 95° F. Wind S, 0 to 5 mph. AM partly cloudy; PM partly cloudy.

Regular observers: 6 in field in 3 parties. Total regular party-hours: 18; total regular party-miles 142; 9 hours and 5 miles on foot; 7 hours and 123 miles by car; 2 hours and 14 miles by boat. Feeders: 1 observer, 1 feeding station, 5 hours watching feeders. Totals: 23 party-hours; 142 party-miles; 6 participants.

Coordinator: Patricia E. Metz, U.S Fish & Wildlife Service, Parkway Business Center, Suite 10, 1000 Business Center Drive, Savannah, GA 31405.

Participants: Vic Carpenter, Nancy Drake, Barry Lowes, John Metz,

Patricia Metz, Ray Porter.

Comments: In Jasper County counters found 6 Hermit Thrushes, apparently part of an early push of this species into South Carolina in 1997.

LXTN - Lexington County, SC. (Piedmont and Inner Coastal Plain)

Total: 38 species; 254 individuals.

 $7{:}10~AM$ to $7{:}00~PM.$ Temp. 65^{o} to $95^{o}\,F.$ Wind W, 0 to 5 mph. AM partly

cloudy; PM partly cloudy.

Regular observers: 1 in field in 1 party. Total regular party-hours: 5.7; total regular party-miles: 69; 1.2 hours and 2 miles on foot; 4.5 hours and 67 miles by car. Feeders: 1 observer, 1 feeding station, 2 hours watching feeders. Totals: 7.7 party-hours; 69 party-miles; 1 participant.

Coordinator and sole participant: Molly Bonnell, 202 Cannon Trail Road,

Lexington, SC 29073.

Comments: No unusual species were reported from Lexington County.

NWBY - Newberry County, SC. (Piedmont)

Total: 60 species; 391 individuals.

7:50 AM to 3:00 PM. Temp. 70° to 90° F. Wind calm. AM partly cloudy; PM partly cloudy.

Regular observers: 3 in field in 1 party. Total regular party-hours: 7; total regular party-miles: 67; 3 hours and 5 miles on foot; 4 hours and 62 miles by car. Totals: 7 party-hours; 67 party-miles; 3 participants.

Coordinator: Tim Kalbach, 3113 River Drive, Columbia, SC 29201.

Participants: Tim Kalbach, Nancy Lyman, Gary Sowell.

Comments: No unusual species were reported from Newberry County.

OCNE - Oconee County, SC. (Mountains and Piedmont)

Total: 65 species; 421 individuals.

6:00 AM to 3:45 PM. Temp. 66° to 94° F. Wind E to N, 5 mph. AM partly cloudy; PM partly cloudy.

Regular observers: 6 in field in 1 party. Total regular party-hours: 8.75; total regular party-miles: 105; 4.75 hours and 2 miles on foot; 4 hours and 103 miles by car. Owling observers: 1 in 1 party; owling party-hours 0.75; owling party-miles: 11. Totals: 9.5 party-hours; 116 party-miles; 6 participants.

Coordinator: Steve Wagner, 316 East Creswell, Greenwood, SC 29646.

Participants: Carroll Belser, Sidney Gauthreaux, Steve Lohr, David Mizrahi, Steve Wagner, Stacey West.

Comments: Birders in Oconee County turned in a very nice single-party count, reporting 19 warbler species and a high total of 21 Eastern Wood-Pewees. The cool white pine - eastern hemlock forests near the Chatooga River in the northwestern part of the county probably is the home to breeding species more typically found at much higher elevations in the North Carolina mountains. This probably explains the 3 Red-breasted Nuthatches and 1 Golden-crowned Kinglet reported.

RCHL - Richland County, SC. (Piedmont and Inner Coastal Plain)

Total: 85 species; 1768 individuals.

4:45 AM to 8:30 PM. Temp. 66° to 90° F. Wind W, 0 to 5 mph. AM partly

cloudy; PM partly cloudy.

Regular observers: 4 in field in 3 parties. Total regular party-hours: 21.25; total regular party-miles: 150; 10.25 hours and 10 miles on foot; 11 hours and 140 miles by car. Feeders: 2 observers, 1 feeding station, 0.5 hours watching feeders. Owling observers: 2 in 2 parties; owling party-hours 2.75; owling party-miles: 30. Totals: 24.5 party-hours; 180 party-miles; 6 participants.

Coordinator: Robin Carter, 4165 East Buchanan Drive, Columbia, SC

29206.

Participants: Robin Carter, Steve Dennis, Caroline Eastman, Tammy Sutherland, Carol Winberry, John Winberry.

Comments: In Richland County birders found 1 Willow Flycatcher (part of a good movement of this species through the state). Congaree Swamp National Monument was the locale for most of Richland's good species, including good numbers of thrushes (17 Veeries, 20 Swainson's Thrushes, 4 Hermit Thrushes, 18 Wood Thrushes), as well as a couple of rare warblers (a Nashville and a Mourning). Both of these warblers, found within a few yards of each other along the service road to the old clubhouse, represent first records for the park.

SPTB - Spartanburg County, SC. (Piedmont)

Total: 89 species; 2966 individuals.

Temp. 63° to 93° F. Wind W to NE, 0 to 11 mph. AM clear; PM clear. Regular observers: 36 in field in 10 parties. Total regular party-hours: 53; total regular party-miles: 206; 35.5 hours and 34 miles on foot; 12.5 hours and 156 miles by car; 5 hours and 16 miles by boat. Feeders: 21 observers, 15 feeding stations, 37 hours watching feeders. Owling observers: 3 in 2 parties; owling party-hours: 6; owling party-miles 1. Totals: 96 party-hours; 207 party-miles; 36 participants.

Coordinator: Lyle Campbell, 126 Greengate Lane, Spartanburg, SC 29307.

Participants: Frankie Altman, John Berry, Susan Berry, Beth Bartel, Michael Bennett, Susan Bennett, Lyle Campbell, Sarah Campbell, Pat Cart, Dan Codespoti, Stan Easley, John Erickson, Roy Fowler, Pat Fowler, John Freeman, Shena Freeman, Onoosh Gahaghan, Ron Gahaghan, Teresa Glenn, Gladys Henry, Flip Jones, Joel Jones, Mickey Marotte, Ed Medlin, Gail Medlin, Mary Ann Meyers, Bill Moody, Marian Murph, Robert Powell, Jenny Scott, Walton Scott, Mac Shealy, Tina Taylor, Dick Thorpe, Lois Thorpe, Gerald Thurmond.

Comments: As usual Lyle Campbell organized a great migration count in Spartanburg County and was rewarded with several good finds: 2 Bald Eagles, a Barn Owl, a Willow Flycatcher, an Orange-crowned Warbler (all rare), and a late Swainson's Warbler.

WMBG - Williamsburg County, SC. (Outer Coastal Plain).

Total: 59 species; 300 individuals.

6:35 AM to 9:15 PM. Temp. 71° to 92° F. Wind NW, 5 mph.

Regular observers: 3 in 2 parties. Total regular party-hours: 9; total regular party-miles: 79; 6 hours and 5 miles on foot; 3 hours and 74 miles by car. Owling observers: 1 in 1 party; owling party-hours 1; owling party-miles 0. Totals: 10 party-hours; 74 party-miles; 3 participants.

Coordinator: John Snow, Route 1, Box 192, Hemingway, SC 29554.

Participants: Joyce Braxton, John Snow, Paula Sutton.

Comments: In Williamsburg County a Least Tern (presumably found at the Hemingway sewage lagoons) was a good find for this inland count.

Summary of Fall 1997 NAMC in South Carolina

State-wide Total: 211 species, 25,689 individuals.

Observers: 127 in 52 parties; Party-hours: 201.15 hours on foot, 133.55 hours by car, 16.75 hours by boat, 2.5 hours by bicycle. Party-miles: 143.75 miles on foot, 2256.5 miles by car, 41 miles by boat, 3 miles by bicycle. Feeder watch: 66 hours by 38 watchers at 34 feeding stations. Owling: 10.5 hours and 71 miles by 14 observers in 11 parties.

Totals: 96 party-hours; 207 party-miles; 36 participants.

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Blue Jay	65	80	91	41	7	-	12	17	140	4	23	33	32	6	10	32	11	יאו	4
American Crow	267	9	8	62	32	9	47	17	139	56	20	20	20	16	18	48	196	40	1067
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crow sp.	17		48					-		80						31			105
Common Raven									4										3 4
Carolina Chickadee	28	10	164	80	80	-	20	16	29	4	22	2	13	16	15	44	84	4	55
Fuffed Titmouse	29	9	136	9	2	2	25	9	93	-	22	9	16	19	6	67	98	٠ ٣	578
Red-br. Nuthatch															က	;)	;
White-br. Nuthatch	=		80						15	-		9			4	19	7	٥	7
Brown-he. Nuthatch	32	14	7		2		Э	2	6	6	٣		7	2		18	. 91	ı	127
Brown Creeper															-	2	2		
Carolina Wren	22	က	93	18	က		9	13	46		31	14	14	14	2	8	29	m	458
House Wren			9	-	-						က						5)	13
Marsh Wren			9																
Solden-cr. Kinglet															-				
Ruby-cr. Kinglet	-			-													2		
Blue-gr. Gnatcatcher	9	7	2				4		80	7	-	က	က	2	2	4	2		5
Eastern Bluebird	22	က	21	53	7		က	12	9/	4	1	-	9	2		28	48	2	291
Veery			16				7				7			-		17	2		40
Gray-cheeked Thrush			7																•
Bicknell's Thrush			Ψ-																
Swainson's Thrush	-		က				6							4	က	20			4
Hermit Thrush	7											9				4			-
Nood Thrush							-		7					က		18	7	-	2
American Robin	17				2				157		2		-	20		20	317		599
hrush sp.												51							'n
Sray Catbird	က		5	4	-		_		7		-	2	2			80	12	-	3
Northern Mockingbird	21	7	97	16	6		4	9	22	6	7	33	7	က		22	58	80	422
Brown Thrasher	19		59	œ	5		2	4	17		10	4	2			8	50	~	129
 oggerhead Shrike 	9		80	-				က	-	က	က		-			10		7	33
European Starling	306	œ	178	45	215		3		228	17	59					61	318	4	1412
White-eyed Vireo	34	7	53	က	_		2	10	-		17	17	-	m	m	43	~	~	176
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Yellow-throated Vireo			-											7	-	က	-		
Narbling Vireo															_	,	•		
Philadelphia Vireo									-										
Red-eyed Vireo	23	2	41				4	2	12	က	16	6	က	6	9	4	2		142
Blue-winged Warbler			-											-	-	-			
Solden-winged Warbler									-						2				
ennessee Warbler	7														01				
Orange-cr. Warbler			-)		-		
Nashville Warbler															-	-	-		
Northern Parula	17		33		-		4		е	2	-	9		"	. 4	- ~			
rellow Warbler			2					-	-					,			-		
Chestnut-s. Warbler	-		7				7		က					6	17				
Magnolia Warbler	က		2						-					2	4	-	^		
Cape May Warbler	-								-								· -		
Black-thr. Blue Warbler			က									-		-	~				
Myrtle Warbler					-				-						,		,		
Black-thr. Green Warbler	بر														c		-		
Blackburnian Warbler								-							1 (
Yellow-thr. Warbler	7		4	4			-		m		~				,	-			ξ.
Pine Warbler	47		62		7	က	12	9	24	27	, L	2	ĸ	19	9	75	21		~
Prairie Warbler			11					က	-		4	ı		!	-		i		•
Palm Warbler			16		က			7	21		12	7					59		
Bay-breasted Warbler									-						10		ì		
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American Redstart	9		31	7			4	-	=		27	2	2	7	7	80	-	7	114
Prothonotary Warbler	7	-										_					_		
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Swainson's Warbler																	,		
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Kentucky Warbler			7						7										
Mourning Warbler																_			
Cmn. Yellowthroat	80	ა	52	7				2	7		4	9		7	2	9		9	87
Hooded Warbler			က						က			_		_	2	-			14
Sanada Warbler									-							-			
rellow-breasted Chat	-			-			7				က								5
Summer Tanager	9	က	7	က	-		7	7	_	7	6	4		4	_	7	2	_	59
Scarlet Tanager											,	. ,		. ,			,		' '
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Daniel Constitution							,												
Kose-br. Grospeak							-								-		-		က
Blue Grosbeak	7		က				-	-			Ξ				-			2	5
Indigo Bunting	36		17				6		က					31	4		2		102
Painted Bunting			7																
Eastern Towhee	19	9	22	က	က		4	12	50		7	2	က	3		13	24	-	149
Bachman's Sparrow			က																
Chipping Sparrow	4	4			7				2							2	00	-	· ~
Field Sparrow				15			2		25								-		46
Savannah Sparrow												7					-		, m
Grasshopper Sparrow									4										4
Seaside Sparrow			2																. 73
Song Sparrow				15					9								2		26
Dark-eyed Junco									4										7
Bobolink			10									92				-	20		6
Red-winged Blackbird	œ		282		13				24	4	6					7	-	7	345
Eastern Meadowlark	7			7	11				16				7			-	7	-	4
Boat-tailed Grackle			194					ဗ			7	98							285
Common Grackle	7	6	371	2	4			2	165	39		9			20	4	337		1002
Brown-he. Cowbird			18	9					36		-	18	2						∞ ∞
blackbird sp.																35	20		85
Baltimore Oriole			-															က	4
House Finch	18		33	7			12		35				10	2		158	9	80	346
American Goldfinch		80		4	-	9	18		56						9		12		8
House Sparrow	80		10		-				24	2		7				4	3	2	29
	;	i	!	!	;														TOTAL
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* Individuals	*	315	6889	525	265		510 1	1733	3461	433	714 1	1673	254	391	421	1768	2966	300	25689
Observers	4	2	15	4	2	-	က	က	15	2	2	9	-	က	9	9	36	က	127
Parties	2	-	9	-	7	-	-	-	6	-	က	ဗ	-	_	-	3	10	7	52
No. of Warbler Species	13	4	18	2	2	-	9	80	20	7	6	6	2	13	19	15	10	2	32

Peggy B. Ferebee Natural Science Center 4301 Lawndale Drive Greensboro, NC 27455 H. T. Hendrickson Department of Biology - UNCG P. O. Box 26174 Greensboro, NC 27402-6174

Compilers' Comments

This year had the lowest participation since 1992. This is reflected in the numbers: in 1997 939.85 party hours were spent counting 62,142 individuals of 210 species. This year only 814.5 hours were spent finding 51,361 individuals of 199 species. 14 count areas were represented, down one from the 15 that participated last year. Chapel Hill, Raleigh, and Shelby did not send in counts this year. New counts for this year were Stone Mountain and Mt. Jefferson. We have increased our mountain coverage, but our coastal coverage is almost non-existent.

As usual we have had a large number of species whose numbers have declined. After years of increase, Double-crested Cormorants showed a sizable drop. Ring-billed Gulls were down, but they may have just left early. Mallards were also down. Common Loons, Pied-billed Grebes, and Canada Geese were up. Wild Turkeys have better than doubled their numbers, but bobwhites were still declining. There was a big increase in coots. As a group swallows, many of the flycatchers, and other insect-eaters such as the Blue-gray Gnatcatcher were down. This may reflect the cool, wet spring. Phoebes, however, were up.

That weather may also account for the increase in "cold-weather birds" like Red-breasted Nuthatches, White-throated and White-crowned Sparrows, and Evening Grosbeaks. While the overall number of juncos was less than last year because fewer were reported by Avery County, they actually showed up in more Piedmont counts. Flickers, Red-bellied, Red-headed, and Downy Woodpeckers were down, as were the mimic-thrushes, shrikes and Bobolinks. Both Rock and Mourning Doves were down. Among the thrushes, robins and Swainson's Thrushes were down, but Ovenbirds were up.

As has been true in the past, many of the warblers were down, including Common Yellowthroats and Yellow-breasted Chats. This was also true for Redeyed Vireos. There were several warbler species that did show an increase: Blackburnian, Yellow-throated, Pine, and Palm Warblers. Summer Tanagers and Blue Grosbeaks declined, as well as cardinals, Indigo Buntings, Eastern Towhees, Swamp Sparrows, and Fish Crows. There were a few more ravens reported.

Also showing an increase were Blue Jays, Ruby-crowned Kinglets, goldfinches, and Chipping and Song Sparrows. Some species are showing an

increase this year after years of decline were Yellow-billed Cuckoos, screechowls, White-eyed Vireos, Field Sparrows, Whip-poor-wills, and nighthawks. Meadowlarks were holding steady. After several years of increases, Ospreys, kestrels, and Scarlet Tanagers were down. Grackles, starlings, Brown-headed Cowbirds, and House Sparrows were all down from previous years, which will dismay few people.

AVNC-Avery County, NC. Center at Grandfather Mountain entrance. May 10, 550 - 2150h. Temp. 40°- 60°F. Some mild fog, otherwise no precipitation; wind 1-3 Beaufort. Sky clear to partly cloudy.

Participants: Compiler and only participant: G. Rad Mayfield, III. 730 Maltba Rd., Newland, NC, 28657.

DUNC- Durham, **NC.** Center one mile east and one mile north jct. Eno River and US 501. April 26, 0530 - 1625h. Temp. 55°-75°F. No precipitation. Wind 0-10 mph, variable, windier in the PM., sky clear.

Participants: Compiler: Michael Schultz, 5504 Woodberry Rd. Durham, NC 27707. Kua Anderson, Don Brightsmith, Bryan Bomberg, Norm Budnitz, Will Cook, Anson Cooke, Dwayne Cooke, Tom Driscoll, John Fredrick, Rachel Harden, Ken Knapp, Janet Krakauer, Tom Krakauer, Todd Plummer, Josh Rose, Lois Schultz, Michael Schultz, Douglas Shadwick, Ben Steere, Johathan Steere, Edith Tatum, Richard Youket, Bruce Young.

Compiler's Comments: Great Blue Heron numbers include 11 chicks on about 20 nests - Knapp on Reeds Creek.

GRNC-Greensboro, **NC.** Center At jct of Highway 220N and Pisgah Church Road. May 2, 630 - 1800h. Temp. 50°-68°. 01" of precipitation; wind 7 mph W in the morning and 18 mph W in the afternoon. Clear in the morning to mostly cloudy in the afternoon.

Participants: Compiler: Don Allen, 2611 David Caldwell Dr., Greensboro, NC 27408. Carolyn Allen, Donald Allen, Charles Campbell, Chris Carter, Sue Cole, Scott DePue, Rose Freeman, Larry Gasper, Isabel Gillespie, Stan Gilliam, Herbert Hendrickson, Sally Howell, Nancy Hunt, Phillip Kellam, Elizabeth Link, Henry Link, Clarence Mattocks, Jim Mattocks, Jean McCoy, Lynn Moseley, Sue Scott, Lucile Swarts, Emily Talbert.

Compiler's Comments: For the most part this was a pleasant and enjoyable day to be in the field. The time before noon certainly started the day right. The afternoon provided rising wind velocities and a small amount of rain in some parts of the count territory, but the temperatures stayed in a comfortable range. In 1997 the cool damp weather seemed be the source of modest count numbers. The 1998 species totals were up by five, but the total number of individual

birds went down by more than 800. Common species such as Mallard, Mourning Dove, American Robin, and Common Grackle were reported in smaller numbers this year. The number of warbler species was up a bit, three groups reported Red-breasted Nuthatches, and the Peregrine Falcon reported by Nancy Hunt and Sue Scott was a source of ample satisfaction.

GVNC- Greenville, NC. Center at 35°35'N 77°14'W, jct SR 1762 & SR 33. April 26, 0530 - 1930h. Temp. 48°- 80F with no precipitation. Wind was 5 mph SW-W, and the sky was clear.

Participants: Compiler John Wright, 1953A Quail Ridge Rd., Greenville, NC, 27858 and Dr. Veronica S. Pantelidis, 106 Lakeview Dr., Greenville, NC, 27858; Brad Carlson, Carl Darden, Jamie Glydon, Tom Henson, Dave Kaminski, Ernie Marshall, Rosalyn Mullins, Veronica Pantelids, Howard Vainright, John Wright, Paula Wright.

ICNC- Iredell County. Center at Chipley Ford Road Bridge at South Yadkin River. May 3, 0630 - 1600h. Temp. 52°-72° F. Heavy thunderstorms in the afternoon. No wind in the morning, SW 15-20 mph in the afternoon. Sky was sunny in the morning, cloudy in the afternoon.

Participants: Compiler Sam Cathey, 130 Park Street, Stateville, NC, 28677. Penny Benbow, Sam Cathey, Lois Goforth, Thad Goforth, Jack Green, Janet Powell, John Robertson, Allen Stanly, Garnet Underwood, Ron Underwood, Laura Webb.

JLNC - Jordan Lake, NC. Center at former crossing of New Hope River and Pea Ridge Rd (Rt. 1700), now under water. May 5, 0500 - 1030h. Temp 45° - 80°F. Slight scattered showers in the afternoon. Wind 0-5 mph S, sky clear in the morning, 50% cumulus developing to overcast in the afternoon.

Participants: Compilers Barbara Roth, 347 Carolina Meadows Villa, Chapel Hill, NC, 27514 and Will Cook, 418 Sharon Rd., NC, 27514. Mary Lou Anderson, Kim Aycrigg, Barbara Beaman, Yvonne Becker, Mary Bird, Barbara Brooks, Peter Burke, Halbert Carmichael, Barbara Coffman, Patrick Coin, Will Cook, Anson Cooke, Jefferson Dalby, Emily Devoto, Matt Dube, Beth Duncan, Claudia Egelhoff, John Finnegan, Bryan Goldston, Maurice Graves, Perry Haaland, Steve Hall, Willard Hartman, Carol Hay, Russell Herman, Loren Hintz, Stephanie Horton, Tom Howard, Betty King, Ken Knapp, Chip Konrad, Janet Krakauer, Tom Krakauer, Barbara Logue, Terry Logue, Phillip Manning, Melinda Meade, Judy Murray, Monica Nees, Rick Payne, Kevin Powell, Faith Reilly, Kathy Roggenkamp, Barbara Roth, Doug Shadwick, Joshua Southern, Sterling Southern, Norm Talman, Trudy Talman, Ginger Travis, Andy Upshaw, Margaret Vimmerstedt, Marta Wayne.

Compilers' Comments: We saw an average number of species on this count, conducted on a pleasant spring day. Our total was 130, 16 short of our high of 146 in 1992, but better by 10 than last year, when our count conflicted with the new Migration Day effort. The individual numbers, 7,887, were also average; last year we only totaled 5,961. We missed a number of shorebirds, possibly because the lake was a bit higher than normal. We also lacked a number of migrant warblers. A few sparrows were missed because of habitat loss.

This count circle is undergoing a siege by developers, due to the continuing expansion of the Research Triangle area and the desire for "country" homes. Perhaps 1/8 of our circle was once covered by a forest known as "Big Woods." This is being eroded from all directions. Fearrington Village is pushing down from the north. Developments are mushrooming from the east (the west side of Jordan Lake), and from the south (above Highway 64.) Most tobacco farms have ceased to exist and are being bought by developers. The Corps of Engineers land around the lake, once old fields, has now grown up into pine forest for the most part, except for park areas. In the south, big industry is increasing, with companies such as Weyerhaeuser, which are creating a huge monoculture of pine forest, cut on a short cycle for pulp manufacture. Golf courses are being created from prime farm land.

Despite this, we had some encouraging results. Among new species for the count were Black Scoter and Alder Flycatcher. Common Nighthawk was seen for only the second time, and a number of Evening Grosbeaks remained. We had the highest number ever of Tufted Titmice, Wood Thrushes, Yellow-throated and Black-throated Blue Warblers, Red-eyed Vireos, and Scarlet Tanagers. I would ascribe this to an increase in accessible forest land, due both to road building through such areas as Big Woods and the fact that old fields have grown into forested land. We had better results with owls this year, too. Yet there were decreases in numbers of kingfishers, Purple Martins, and Redwinged Blackbirds. Only one Bobolink was observed in passage: Usually we get quite a few. For only the second time since this count started in 1977 we found no Northern Waterthrushes in passage. Kentucky Warblers seem to be barely hanging on, with only 2 seen in each of the past 4 years. The Bachman's Sparrow has lost its habitat, at least until another clear-cut occurs in the south of the circle; none were found.

MJNC - Mount Jefferson, NC. Center at 36°28'N 81°27'W. May 9, 0600 - 2130h. Temperature 55°- 65°F. Light rain early, clear later. Wind very light out of NW, with the sky overcast early, clear by 1300.

Participants: Compiler James Corman, 9124 NC Hwy 93, Piney Creek NC, 28663. George Capra, Paula Capra, John MacConnell, Janet Kelly, Les Saucier.

NRNC - New River, NC. Center at 36°31'N 81°12'W. May 9 0500 - 1430h. Temperature 52°-65°F. Light rain in the morning, clear later. Wind was calm to light breeze, NW, with heavy overcast early, clearing by noon.

Compiler: James Corman, 9124 NC HWY 93, Piney Creek, NC 28663. Harold Blevins, Velma Blevins, Opal Bryant, James Corman III, James Corman Jr., Adelia Cox, Henrietta Cox, Kenneth Cox, Katherine Higgins, Elizabeth Scott.

SMNC - Stone Mountain, NC. Center at 36° 20' N 81° 01'W. May 9, 0700 - 2030h. Temperature 55°-74°F. No precipitation. Wind 10-15 mph SW, with clear skies.

Participants: Compiler James Corman, 9124 NC HWY 93, Piney Creek, NC 28663. Jim Billings, Greg Church, Curtis Smalling.

Compiler's comments (for SMNC, MJNC, AND SMNC): We have had a very good effort this year, with an excellent number of participants and generally good weather for birding. In every year the number and competence of our counters increases, giving better coverage of our areas and better data.

There are several aspects of the spring migration this year that are apparent to me after this count that are unexpected and make this year quite different from those in the recent past. Despite the extremely mild winter and spring, we are seeing far more winter birds lingering in this area than in the past, with numerous reports of Evening Grosbeaks, Pine Siskins, Dark-eyed Juncos, White-throated Sparrows, 2 Red-breasted Nuthatches (G&P Capra), and one Ruby-crowned Kinglet (Corman). This unexpected trend was confirmed by Jim Keighton's report on May 18 of nesting Winter Wrens at Air Bellows Gap.

Further, numbers of all species of hawks appear to be present in very low numbers compared to past years at this date, indicating that the migration is late. These include virtually all flycatchers, thrushes, cuckoos, Grasshopper Sparrows, Chimney Swifts, and Green Herons. Warbler diversity is similar to that of the past, but total numbers are lower. Only one Red-shouldered Hawk was reported, by Curtis Smalling, and only one party (Corman and Corman) reported kestrels. This appears to be the first year since 1987 that kestrels will not be nesting in boxes on my farm.

We have had several truly unusual reports on these counts, as follows: "Lawrence's Warbler": A singing male of this extremely rare Blue-winged X Golden-winged Warbler hybrid was carefully observed by Les Saucier at his home near Todd in Ashe County.

Red-breasted Merganser: A male of this unusual migrant inland was observed by the Blevins at Farmer's Fish Camp Bridge over the New River in Alleghany County.

Bobolink: One male observed by Katherine Higgins near Cox's Chapel in Grayson, possibly indicating a new site for this very rare breeder in this area.

Black Tern: One bird was carefully observed circling over the New River near Piney Creek by Corman & Corman. This is an extremely rare inland migrant in the spring, with only three references in the literature readily available to me regarding sightings in the NC mountains north of Asheville (Julian Park Lake, Boone).

Black-billed Cuckoo: One bird arrived at my farm in Piney Creek on 12 May, giving us a count week (CW) report of this difficult to find species.

Cliff Swallow: One report of 2 birds by Elizabeth Scott on the New River in Grayson County, VA, near Independence.

Blue Grosbeak: Several reports of this species that appears to be expanding its range west of the Blue Ridge, with A. & K. Cox and J. Corman, Jr. reporting on the count, and several reports from the eastern Alleghany County.

Summer Tanager: Only one report, from the usual site in older hardwoods on my farm in Piney Creek.

Golden-winged Warbler: Several reports from the usual New River locations, with Saucier having a new site near Todd.

Warbling Vireo: Several reports from the usual New River sites.

Kentucky Warbler: One report of this rarely seen species by Blevins in Grayson County.

Red-headed Woodpecker: One reported by H. Cox from Cox's Chapel in Grayson County.

Bobwhite: Only one report of a single calling male in Piney Creek.

RVNC- Raven Rock State Park, NC. Center at jct of NC 210 and SR 1434; 2.75 miles north of Lillington. April 25, 0600 - 1100h. Temperature 45°-77°F with no precipitation. Wind was variable, 0-5 mph, sky mostly clear throughout the day.

Participants: Compiler Paul C. Hart, Raven Rock State Park, 3009 Raven Rock Rd., Lillington, NC 27545. David Brown, Paul Hart, Scott Hartly, Bobby Lutfy, Mitch Reese, Larry Rose, Molly Salsig, Mary Stevens, Sarah Stevens, Erik Thomas.

Compiler's Comments-The count was held about a week earlier this year to avoid conflict with the Spring Carolina Bird Club meeting. The species total of 114 is about average. We had several "misses", including Red-headed Woodpecker (which was seen the morning following the count), Horned Lark, Yellow Warbler, American Woodcock, and Wild Turkey. Seventeen species of warbler were observed, which is a few species lower than the past few years. Cliff Swallow was observed again this year at the US 401 bridge over the Cape

Fear River in Lillington. This species nested at this site last year. It appears that this may become a regular nesting site for this range expanding species.

Among the "good finds" this year were Northern Waterthrush by Mitch Reese, Baltimore Oriole by Erik Thomas, and Great Egret by Mary Stevens and Molly Salsig. Otherwise, there were no remarkable species this year.

SPNC-Southern Pines, NC. Center at 35°13N 79°19'W, 1 mile NE of the skyline. April 26, 0500-1630h. Temp. 57°-77°F. No precipitation. Wind 5 mph S -22mph SSW with a clear to partly cloudy sky.

Participants: Compiler Libba Watson, and Jay Carter, Weymouth Woods-Sandhill Nature Preserve, 1024 Ft. Bragg Rd., Southern Pines, NC 28387. Jason Bak, Jackie Britcher, Dick Burk, Marion Burk, Susan Campbell, Jay Carter, Joe Daigneau, Kristin Daigneau, Dick Dole, Lois Dole, Charlotte Gantz, Barbara Gearheart, Scott Hartly, Pat Hoffman, Dean Holzgraz, Tom Howard, Sally Logan, Leo Magiera, Al McDonald, Trevor McDonald, Susan Ladd, Alan Schultz, Megan Schultz, Barbara Simpson, Mary Stephenson, Libba Warson, Alice Wood, Don Wood.

WSNC- Winston Salen, NC. Center at jct of Bus. I-40 and Silas Creek Parkway. May 2, 0600-1800h. Temp. 56°-74°F. Only a trace of precipitation. Wind was from the southwest and the sky was clear to cloudy.

Participants: Compiler David Disher, 4145 Chatham Hill Drive, Winston-Salem, NC 27104. Don Amick, Kay Bergey, Gerald Berry, Don Burke, Pam Burke, Reggie Burt, John Carter, Linda Davis, Rebecca Deaton, Doug Deneve, David Disher, Susan Disher, Gardner Gidley, Margaret Gidley, Bill Hammond, John Hammond, Susan Hammond, Burt Hollifield, Royce Hough, Bill Jackson, Lois Jones, Judy Jordan, Nancy Jordan, Pete Jordan, Barbara Kendrick, Leon Kendrick, Peggy Kinlaw, Liz Schmidt, Jim May, Sue Moore, Tom Mowbray, Ed Mulvey, Margaret Mulvey, Ann Newson, Dottie Pennington, Ann Pollard, Paul Powers, Lloyd Ramsey, Tom Schmid, Jackie Shelton, Marilyn Shuping, Ramona Snavely, Sebastian Sommers, Paul Spain, Jim Spencer, Bill Sugg, Gray Tuttle, Jay Wilhelmi, Bob Witherington.

Compiler's Comments: Overall the migrant numbers were lower than in the past. The main warbler migration did not seem to occur all at once as it has before. This count has a new spring record (during count period) of an immature Bald Eagle observed at Salem Lake. Every year there are fewer and fewer farming areas and more and more housing developments in our count circle. Our grassland species are getting more difficult to find.

CGSC-Congaree Swamp, SC. Center at 33°46'N, 80°45'W; 400 meters NW of confluence of Bates Mill Creek and Congaree Swamp. May 9, 0600-1900h.

Temp. 65°-83°F. No precipitation. Wind was calm, and the sky was clear to partly cloudy.

Participants: Compiler Robin Carter, 4165 E. Buchanan Drive, Columbia, SC 29206. Fran Almond, Robin Carter, Steve Dennis, John Foy, Gene Hall, Joyce Hall, Thomas Hartman, Heidi Hoerman, Leanne Jarrett, Sonny Jarrett, Alice Parham, Jack Stuart, Lula Stewart, James Wilson.

SPSC-Spartanburg, SC. Center just south of downtown airport. May 9, 0530-2230h. Temperature 60°-79°F. No precipitation. Wind was calm to 17 mph, and the sky was clear.

Participants: Compiler Lyle Campbell, 126 Greengate Lane, Spartanburg, SC 29307. Robbie Allen, Frankie Altman, John Berry, Susan Berry, Beth Bartel, Jim Brown, Pat Burton, David Campbell, Lyle Campbell, Matthew Campbell, Sarah Campbell, Marion Clark, Aaron Cooper, G.R. Davis, Stan Easley, Nell Foster, Roy Fowler, Pat Fowler, Onoosh Gahaghan, Ron Gahaghan, Teresa Glen, Ashley Glen, Cathy Hill, Stephen Harris, J.B. Hines, Myra Hines, Flip Jones, Joel Jones, Linda Kimbrell, Tiffany Kimbrell, Micky Marotte, Ed Medlin, Gail Medlin, Jim Miller, Bill Moddy, Marian Murph, Mary Ann Myers, Gill Newberry, I.B. Panell, Lisa Pearson, Mary Potter, Doug Raynor, Walton Scott, Ginny Scott, Tina Taylor, Dick Thorpe, Lois Thorpe, Gerald Thrumond.

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Species Red-w. Blackbird Eastern Meadowl	Common Grackle Brheaded Cowb Orchard Oriole Baltimore Oriole	Puple Finch House Finch Pine Siskin American Goldfinch32 Evening Grosbeak	House Sparrow	No. of Species No. of Individuals Total Field Hours Hours on foot Hours by car Hours by boat Hours by bicycle Hours by hitch Hours by hitch Hours by bricycle Hours by ATV Hours by ATV Hours by ATV Hours by ATV Hours by boat Miles by ATV Miles Owling Date

General Field Notes

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First Specimen Record of the Cave Swallow *Petrochelidon* fulva pelodoma in Eastern North America

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Ornithology Department
Charleston Museum
360 Meeting Street
Charleston, SC 29403

We retrieved an emaciated and moribund Cave Swallow (*Petrochelidon fulva*) from the ground at the sheltered base of a low building at the Old Coast Guard Station at the north end of Folly Beach, Charleston County, South Carolina, at 1500 hr on 31 October 1993. The bird died shortly thereafter and was salvaged (ChM 1993.16.181). This constitutes the first record for South Carolina (McNair and Post 1993).

The light buffy-orange chin and throat distinguish the Cave Swallow from any race of the Cliff Swallow (*P. pyrrhonota*). The light buffy-orange throat, cheeks, and collar, dark gray flanks, pale forehead and chestnut rump, and long wings (chord = 109.5 mm; flattened = 110 mm; see Phillips 1986:37-38) indicate the subspecies of Cave Swallow is *P. f. pelodoma* (=pallida), from the southwestern United States and northern Mexico (see Smith and Robertson 1988 for a discussion on Cave Swallow taxonomy; also Phillips 1986 and Rose and Turner 1989; subspecific identification verified by S. Cardiff and J. V. Remsen, *in litt.*). Our verified record is also the first of this subspecies from eastern North America (Phillips 1986, Smith and Robertson 1988, West 1995).

Close examination of the bird does not reveal any indication of hybridization with either the Cliff or Barn (*Hirundo rustica*) swallows (see Martin 1980). The bird was a hatching-year female (skull 15% unossified; see Walters 1983) weighing 14.0 g. The first prebasic molt was suspended

(remiges): old feathers (juvenal) were pp 7-9, sec 5-6, and pp cov 8-9; new feathers (first-basic) were pp 1-6, sec 1-4, 7-9 (terts), sec cov, and pp cov 1-7. The bird had also undergone a more or less complete body molt. No feathers were actively molting.

The Cave Swallow was first seen by McNair at 1300 hr when it was flushed from under another abandoned building at the Old Coast Guard Station. The bird flattened and spread itself out against a warm substrate occasionally, either a rooftop or on the ground in an exposed area, in an apparent attempt to warm itself. The swallow never attempted to feed, but it flew weakly, and repeatedly attempted to find shelter underneath, within, or on top of various abandoned buildings. Some entrances to shelter underneath buildings were as narrow as 4-6 cm in diameter, and some were partially obstructed by vegetation. Nevertheless, the swallow attempted to enter some of these openings. This is consistent with Cave Swallow behavior within its normal range. The species roosts under bridges, culverts, and buildings, or in cave mouths (West 1995).

The occurrence of the Cave Swallow was associated with an unusual composition of other long-distance migrants at our mist-net banding station the same day. An unusually strong cold front arrived after 0100 hr on 31 October. The wind shifted from SW to NW, at 32-40 km, and the temperature dropped precipitously from 18 to 4-6 degrees C. A larger number of species and individuals of long-distance migrants were captured on 31 October, as compared to the four days before and after 31 October on which banding occurred (sign test, two-tailed, p < 0.05; Table 1). This difference suggests that the Cave Swallow may have been associated with a large-scale movement of long-distance migrants, in response to adverse weather.

In summary, the first specimen record of the Cave Swallow in South Carolina was the subspecies *P. f. pelodoma* from the southwestern United States and northern Mexico. This is the first verified record of this subspecies from eastern North America.

Acknowledgments

We thank S. Cardiff and J. V. Remsen, Museum of Zoology, Louisiana State University, for verifying the subspecific identification of the Cave Swallow.

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32 Cave Swallow

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	Number of Species		Number of Individuals	
Date	NeoT	Other	NeoT	Other
24 October	¢.	7	6	13
25 October	2	5	3	22
27 October	2	14	7	41
28 October	2	6	3	11
31 October	4	3	18	3
1 November	4	11	7	23
2 November	5	13	18	41
7 November	2	11	2	32
8 November	1	10	1	21

TABLE 1. Number of Species and Number of Individuals for Species Classified as Neotropical Migrants (NeoT) or All Other Species (Other) Which Were Captured in Mist-Nets During a Portion of Autumn Migration at North Folly Beach, South Carolina (32° 41' N, 79° 53' W), in 1993.

Second Winter Record of Ruby-throated Hummingbird in South Carolina

Bob and Martha Sargent The Hummer/Bird Study Group, Inc. 7570 Mack Hicks Road Trussville, Alabama 35173

On 29 January 1998, we visited the residence of Dennis and Donna Forsythe at 748 Swanson Avenue, James Island, South Carolina. The Forsythes requested that we capture, band, and document an *Archilocus* hummingbird feeding at their hummingbird feeder. Prior to our arrival, they had field-identified this bird as an immature male Ruby-throated Hummingbird (*A. colubris*) based on the presence of red feathers in the gorget.

Arriving at the residence at 0930 hrs, we were promptly greeted with the bird's sharp scold notes that positively identified it as a male Ruby-throated. We deployed our cage-trap at the feeder location, and the capture was quickly accomplished without incident. In the hand, this second-year male Ruby-throated was banded with band number 3000Y30284.

The following measurements were taken: wing-40.51mm, tail-25.1mm, exposed culmen-16.41mm, and weight-3.06 gr. There were no traces of any fatty deposits as the lean weight indicated. Close examination of the upper mandible with a 16X jeweler's loupe revealed deeply incised striations along 85% of the length of the bird's soft bill. These deep wrinkles were strong indicators that this bird was a very late hatchling, probably out of the egg near the end of September or early October, 1997. We based this estimate on our ten-year study of Ruby-throateds. This study involved the aging and sexing thousands of immature birds. The only indications of molt were the presence of new tertials and part of the secondaries, and fresh feathers on the underparts. The lustrous feathers of the crown, nape, and rump still had the buffy edging associated with very young immature hummingbirds. A count of the red reflecting feathers in the gorget yielded only seven in a random pattern. Again, this was more supporting evidence of the unusually young age. At this point, some appropriate feather samples were taken, and a series of macro photos was taken to complete the documentation. Copies of these photographs have been submitted to the South Carolina Bird Records Committee.

The immature male Ruby-throated Hummingbird was hand fed, color-marked on the crown, and released at the capture site. As is our custom, we stayed on site long enough to observe it return to the feeder and resume its normal foraging activities.

This is the second documented occurrence of a wintering Ruby-throated Hummingbird in South Carolina. The first was a female salvaged at Surfside Beach on 11 January 1988. It is now in the Charleston Museum. We also saw but did not capture another Ruby-throated and another hummingbird of unknown species in a yard about 200m from the Forsythes' home.

These observations clearly indicate the need for additional information on wintering hummingbirds in South Carolina much like the studies we have conducted elsewhere in the eastern United States.

Literature Cited

McNair, D B and W Post. Supplement to status and distribution of South Carolina birds. Charleston Museum Ornithological Contribution No. 8. Charleston, South Carolina, 1993.

CAROLINABIRDS

Carolinabirds is an Internet e-mail discussion group about birds and birding in the Carolinas. Subscribers frequently post sightings to it similar to those found in Briefs for the Files, but unusual behavior receives more attention. Subscriptions are free. To subscribe, address an e-mail message to <majordomo@acpub.duke.edu>. Don't fill in the subject line. As your message, simply put, "subscribe carolinabirds" (without the quotes). You will receive a confirmation and more information shortly. Submissions for Briefs for the Files should be sent directly to Ricky Davis.

BRIEFS FOR THE FILES

Ricky Davis 608 Smallwood Drive Rocky Mount, NC 27804 RJDNC@aol.com

(All Dates Summer 1998)

Briefs for the Files is a seasonal collection of uncommon to rare or unusual North and South Carolina bird sightings and events which do not necessarily require a more detailed Field Note or article.

I rely in part on sightings reported in Carolinabirds. Please don't, however, rely on me to pick up your sightings from Carolinabirds. Instead, please also send your sightings directly to me.

COMMON LOON: Lingering loons included five north of Rodanthe, NC, during July (Bob Burrell), three in eastern Carteret County, NC, June 14 (John Fussell), and one on Lake Russell, Anderson County, SC, June 21 (Lex Glover and Mike Turner).

PIED-BILLED GREBE: A locally uncommon find was a nest attended by two birds near Santee, Orangeburg, SC, July 18 (Lex Glover).

HERALD PETREL: Herald Petrels continued to be found off of North Carolina, with single dark phase birds off Hatteras Island July 12 (Todd Pusser, *fide* Brian Patteson) and off Hatteras July 18 & 25 (Brian Patteson *et al.*).

BLACK-CAPPED PETREL: The peak count this summer was 137 off Oregon Inlet, NC, July 20 (Brian Patteson *et al.*).

BAND-RUMPED STORM-PETREL: The best counts of this storm-petrel were 30 off Hatteras, NC, July 18 and 53 off Oregon Inlet, NC, July 20 (Brian Patteson *et al.*).

WHITE-TAILED TROPICBIRD: There was only one report this summer, with one due east of Cape Hatteras, NC, July 27 (Patteson *et al.*).

AMERICAN WHITE PELICAN: One was an unexpected surprise during summer in the ACE Basin, SC, July 26 (Bert Fisher and Leto Copeley).

BROWN PELICAN: An immature was found at Falls Lake, NC, July 17 by Jonathan Steere. Is it possible this could be the same individual that was there during last fall?

DOUBLE-CRESTED CORMORANT: Indicative of this species' current expansion and increase inland was the discovery of a dozen birds around 13 nests on Lake Russell, Anderson County, SC, June 21 (Lex Glover and Mike Turner).

MAGNIFICENT FRIGATEBIRD: The recent trend of multiple sightings in the Carolinas was broken this year with only one report: a female was over the soundside of Ocracoke Village, NC, June 16 (*fide* Marcia Lyons).

SNOWY EGRET: One of the best counts inland was the four at the Little Creek Impoundment, Chapel Hill, NC, July 26 (Will Cook). Also three were at Gray Creek, Cumberland County, NC, July 20 (Phil Crutchfield).

LITTLE BLUE HERON: One was far inland at Asheville, NC, July 25, as noted by Simon Thompson.

REDDISH EGRET: Immatures of this species turned up at the usual places again this summer. Singles were at Huntington Beach State Park, SC, July 11 (Taylor Piephoff *et al.*), Sunset Beach, NC, July 13 and Ft. Fisher, NC, July 29 (*fide* Taylor Piephoff).



Lucy Smith, Mt. Pleasant, SC

YELLOW-CROWNED NIGHT-HERON: There were good numbers found at the Little Creek Impoundment, Chapel Hill, NC, this season. Numbers built up from one on July 5 to six July 19, involving several adults and immatures (Rob Gluck). The Greensboro, NC, breeding colony continued this year, where at least two nests were found and at least 8 young fledged (Elizabeth Link). And unexplainable were single immatures found far offshore of Hatteras, NC, July 18 & 25 (Brian Patteson *et al.*). Where were these birds coming from?

WHITE IBIS: This species wandered inland in good numbers across the Carolinas. At the Little Creek Impoundment, Chapel Hill, NC, numbers built up from one on July 17 (Rob Gluck) to at least 20 on July 26 (Will Cook). At least three were at a pond in northern Mecklenburg County, NC, July 14 - early August (David Wright). Farther inland, two were at Bethabara Park, Winston-Salem, NC, July 6 - 27 (fide Ramona Snavely).

FULVOUS WHISTLING-DUCK: A rare summer sighting involved one in flight with a Wood Duck in the rice fields west of the US 17 bridge in Georgetown, SC, July 19, 1998 (Clay & Pat Sutton, *fide* Harry LeGrand).

BLACK-BELLIED WHISTLING-DUCK: Up to four were near Yemassee, Hampton County, SC, June 3 (Lex Glover) until at least early August (Carroll Richard, sev. obs.). With the species being found in the state earlier [the Yemassee area last year, May 26 and Sept. 15, 1997 (Bob & Carroll Richard), and two at nearby Donnelly W.M.A., Colleton County, July 30, 1994 (Dean Harrigal *et al.*)], in Georgia this year, and the expansion in Florida, these could be natural vagrants instead of escaped birds. Further monitoring of these birds is definitely needed.

NORTHERN PINTAIL: One was a very unexpected summer lingerer at Brier Creek Reservoir, Wake County, NC, June 28 (Ricky Davis).

RING-NECKED DUCK: Locally unusual summer reports included two at the Goldsboro, NC, Wastewater Treatment Plant all summer (Eric Dean) and one at the Orangeburg, SC, Fish Hatchery June 7 (Lex Glover).

LESSER SCAUP: Five was an impressive count for obviously late spring migrants near New Bern, NC, June 2 (Bob Holmes).

COMMON EIDER: An immature male was present at the Cape Lookout, NC, jetty until at least early July (*fide* John Fussell).

BLACK SCOTER: Another late duck was the Black Scoter seen at Cape Lookout, NC, June 7, as noted by Peter Bridge and Cynthia Renk.

BUFFLEHEAD: A female was observed on the North River, Camden County, NC, July 14 by Merrill Lynch. This individual's presence in mid-summer was due to the fact that it was injured and probably never tried to move north this spring.

HOODED MERGANSER: Late Hoodeds (or possible local nesters) included two on Julian Price Lake, Watauga County, NC, June 27 (Dwayne & Lori

Martin) and one on University Lake, Chapel Hill, NC, June 4 (Susan Campbell).

RED-BREASTED MERGANSER: One was slightly late at Oregon Inlet, NC, June 1 (Rick Knight), and up to two were definitely lingering non-breeders at Mt. Pleasant, SC, July 18 (*fide* Pete Worthington).

RUDDY DUCK: This species is a notorious late lingerer and localized summering species. This year the best counts were several all summer at the Goldsboro, NC, Wastewater Treatment Plant (Eric Dean) and eight at the Savannah Spoil Site, Jasper County, SC, June 9 (Steve Calver).

SWALLOW-TAILED KITE: Locally uncommon were one in Conway, SC, July 19 (Lex Glover and Giff Beaton) and two in Norway, Orangeburg County, SC, July 22 (Lex Glover and Lynne Askins).

MISSISSIPPI KITE: This species continues to increase in North Carolina during the summer. Some of the better reports this year included up to five at Falls Lake June 14 (Josh Rose *et al.*), two at Jordan Lake June 20 (Rob Gluck, *et al.*), and five over Rockingham July 25 (Bill & Barbara Gearhart).

SHARP-SHINNED HAWK: This species is much rarer in summer than the Cooper's Hawk. Therefore of note were single birds at Clemmons, NC, June 21 (Lloyd Ramsey), at Claremont, NC, June 30 (Dwayne & Lori Martin), north of Sanford, NC, July 9 (Jay Carter), and in Winston-Salem, NC, July 31 (*fide* Ramona Snavely).

COOPER'S HAWK: Cooper's Hawks continued to increase as a summering bird in the Carolinas. The only definite breeding evidence reported, though, was of three juveniles in a yard in Simpsonville, SC, July 12, as noted by Paul Shewmaker.

BROAD-WINGED HAWK: The most easterly report this year was of one at Williston, Carteret County, NC, June 14 (John Fussell), probably a late migrant. **AMERICAN KESTREL:** A pair once again raised young at the Cherry Hospital, Wayne County, NC, area this summer (Gene Howe). Also one showed territorial behavior when seen chasing a Red-tailed Hawk at the Durham Athletic Park, Durham, NC, June 15 (John Frederick).

AMERICAN COOT: More reports than normal were had for summering coots. Eight were at New Bern, NC, June 2 (Bob Holmes), two were paired up at Sunset Beach, NC, June 14 (Ricky Davis), two were at the Orangeburg, SC, Fish Hatchery June 7 (Lex Glover), and one was at Beaver Lake, Asheville, NC, from July 2 until August (Gail Whitehurst).

AMERICAN AVOCET: Six avocets at Salem Lake, Forsyth County, NC, July 17 (*fide* Ramona Snavely) provided a first record for the county.

SPOTTED SANDPIPER: Three were quite late at the Bethel, NC, Sewage Lagoons June 7, as noted by Ricky Davis.

UPLAND SANDPIPER: The only reports received were of nine at the Orangeburg, SC, Sod Farm July 26 (Tim Kalbach) and two at the Cherry Hospital grounds, Wayne County, NC, July 30 (Eric Dean).

LONG-BILLED CURLEW: One was at its usual spot, Ft. Fisher, NC, July 26 (Gene Howe) and 29 (*fide* Taylor Piephoff).

BAR-TAILED GODWIT: A basic-plumaged individual was at North Pond, Pea Island NWR, NC, July 22 (John Wright). Seen only in the morning, the bird was of the expected race "*lapponica*", and was the first Bar-tailed reported from the Carolinas since the spring 1993 Portsmouth birds.

MARBLED GODWIT: One found at Gray Creek, Cumberland County, NC, July 20 - 26 (Phil Crutchfield and Hal Broadfoot) provided only about the 5th inland record for the state.

BAIRD'S SANDPIPER: An individual in alternate plumage was seen at the Orangeburg, SC, Sod Farm July 19 (Pete Worthington), providing a very rare occurrence for that plumage in the Carolinas.

DUNLIN: Three in alternate plumage were at the Orangeburg, SC, Sod Farm July 17 - 19, as noted by Pete Worthington. This report provides a very rare summer occurrence of this species, normally not occurring until August or later in any numbers.

STILT SANDPIPER: One was slightly early at the Savannah Spoil Site, Jasper County, SC, June 25 (Steve Calver).

BUFF-BREASTED SANDPIPER: The only report was of one at the Orangeburg, SC, Sod Farm July 26, as noted by Tim Kalbach.

SHORT-BILLED DOWITCHER: One was locally unusual east of Greenville, NC, at a golf course on July 5 (Ricky Davis).

WILSON'S PHALAROPE: The only ones reported were at South Pond, Pea Island NWR, NC, with one July 13 & 19 (John Wright and Ricky Davis) and three July 23 (John Wright, Harry LeGrand, Jeff Pippen, Gene Howe, and Will Cook).

RED-NECKED PHALAROPE: A female was a nice surprise in the pond at Cape Hatteras Point, NC, June 4 (Henry & Elizabeth Link).

SOUTH POLAR SKUA: Only one was seen this summer, off Hatteras, NC, in early July by Capt. Spurgeon Stowe, *fide* Brian Patteson.

POMARINE JAEGER: An adult light phase individual was seen on the beach at Kill Devil Hills, NC, July 6 (Audrey Whitlock and Keith Watson), providing a rare on-land sighting for the Carolinas. Less unusual were the three off Morehead City, NC, July 18 (Brad Carlson).

GREAT BLACK-BACKED GULL: One, seemingly sick or injured, was very unusual inland during the summer at Falls Lake, NC, July 11 (Jonathan Steere). **CASPIAN TERN:** One at Jordan Lake, NC, June 21 (Ricky Davis and Jeff Pippen) was quite early for a fall migrant.

COMMON TERN: One of the most unusual nesting sites ever found of this species involved a pair nesting on top of a flat concrete bridge support in the Beaufort, NC, channel this summer (Keith Rittmaster and John Fussell). Two eggs were present June 11 and by July 3 two large young were seen. They were not seen after then, and it is hoped that they were able to fledge successfully. Of interest was the material used for the nest scrape - broken shells left earlier by gulls using the support as a shell-breaking surface.

BRIDLED TERN: The best reports included two out of Morehead City, NC, July 18 (Brad Carlson) and five off Oregon Inlet, NC, July 27 (Brian Patteson *et al.*).

SOOTY TERN: Two off Hatteras, NC, July 25 (Patteson *et al.*) were expected, but more unusual were one over Cape Hatteras point, NC, June 7 (Keith Watson) and one near Ft. Fisher, NC, July 26 (*fide* Taylor Piephoff).

BLACK TERN: One at New Bern, NC, June 2 was locally unusual during the spring migration of this species (Bob Holmes).

EURASIAN COLLARED-DOVE: The Beaufort, NC, birds continued from the spring, and a peak count of four was had July 27 (Simon Thompson). The Snead's Ferry, NC, birds also remained from spring, and of note was one carrying material to a nest on July 6 (Nell Moore).

WHITE-WINGED DOVE: The Beaufort, NC, birds found during the spring remained with at least four being in the area (sev. obs.). Of interest was the fully-feathered young picked up on June 12 (fide John Fussell) and the two adults and one young at a nest on July 5 (Jimi & Nell Moore). Throwing doubt onto the "wildness" of these birds is the fact that one was seen to have leg bands (Frank Enders) and therefore local escapes can't be ruled out. Other reports of this species included one in flight at Atlantic Beach, NC, June 11 (John Fussell) and one on Harbor Island, SC, July 11 (George & Judy Halleron).

RUFOUS HUMMINGBIRD: An adult male was in Balsam Grove, Transylvania County, NC, July 29 - 30 (*fide* Norma Siebenheller). As usual the adult males found in the Carolinas tend to be the early migrants in July and August.

NORTHERN "RED-SHAFTED" FLICKER: An individual of this western form of the Northern Flicker was seen in flight at Beaufort, NC, on the highly unusual date of July 19 (Brad Carlson). The few previous reports for North Carolina have been during the more expected fall migration or winter seasons. **ALDER FLYCATCHER:** One on territory east of Jefferson, Ashe County, NC, July 11 was considered to be at a rather low elevation (3,000') for the nesting season (Harry LeGrand).

WILLOW FLYCATCHER: One calling at Mason Farm, Chapel Hill, NC, June 8 (Susan Campbell) was probably a late migrant.

GRAY KINGBIRD: This species continued to be found at Cape Lookout, NC, with one there June 6 (Peter Bridge and Cynthia Renk) and possibly two there July 2 (Nell Moore).

SCISSOR-TAILED FLYCATCHER: One was near Townville, SC, June 28 (Don & Steve Cox), continuing the string of sightings in the Carolinas for the last several years!

LOGGERHEAD SHRIKE: One was on the sound side of Sunset Beach, NC, June 14 (Ricky Davis), providing a locally rare sighting for the breeding season in that part of the state.

WARBLING VIREO: The Beaver Lake, Asheville, NC, birds were present again this year, and from one to two birds were seen all summer (sev. obs.).

COMMON RAVEN: The birds present in downtown Greensboro, NC, from the spring were still being seen through July (Elizabeth Link).

BANK SWALLOW: One at Falls Lake, NC, June 7 (Will Cook and Randy Emmitt) was most likely a late spring migrant.

CLIFF SWALLOW: One of the biggest colonies located on the eastern edge of the breeding range involved 200 nests at a bridge near Havelock, NC, during the summer (Bill Rogers, *fide* John Fussell).

NORTHERN MOCKINGBIRD: In the weird department was the "flock" of 30(!) mockingbirds in one tree near Georgetown, SC, July 21 (Paul Sykes). What could have caused this behavior in a normally solitary species?

BROWN THRASHER: Another instance of an unusual assemblage of birds was the 15 thrashers in one group in the yard of Merrill Lynch near Green Level, Chatham County, NC, on June 27. Lynch figured the group consisted of three broods and parents hanging together for some reason.

AMERICAN PIPIT: One heard calling at Cape Hatteras point, NC, June 1 (Rick Knight) was extremely late and possibly a record date for the coastal region.

CEDAR WAXWING: This species was once again found on the eastern edge of the range in North Carolina. Two were in Edgecombe County June 7, and a pair was seen building a nest in eastern Chatham County June 21 (Ricky Davis). Also in eastern Chatham County, Merrill Lynch found a pair July 5 and another pair in his yard near Green Level July 13-21.

"LAWRENCE'S" WARBLER: A male of this Blue-winged XGolden-winged Warbler hybrid was on territory along Candy Mt. Road, west of Murphy, NC, June 3 (Jim Edwards and Jane Chew). The bird was observed singing a Blue-winged type song.

CHESTNUT-SIDED WARBLER: One was a very late migrant near the coast at Alligator River NWR, Dare County, NC, June 3, as noted by Merrill Lynch.

MAGNOLIA WARBLER: A male singing at Carver's Gap, Roan Mountain, NC, June 15 & 19 was apparently a wandering, unmated individual (Rick Knight).

NORTHERN WATERTHRUSH: One was seen well and heard singing at Bethel, Fairfield County, SC, on the unusual date of June 23 (Donna Bailey). The presence of this bird at that locality in late June defies explanation, unless it was an extremely early fall migrant.

LOUISIANA WATERTHRUSH: Two on territory in the Green Swamp, Brunswick County, NC, June 14 (Ricky Davis) were locally rare in summer, being on the edge of the normal breeding range.

DICKCISSEL: Some of the reports of this erratic but annual summer visitor included three males singing in eastern Washington County, NC, June 20 (Harry LeGrand, Jeff Pippen and Scott Hartley), two singing males east of Greenville, NC, early June to early July (*fide* John Wright), two all summer at the VOA-B site, Pitt County, NC, (John Wright), three pairs near Lattimore, Cleveland County, NC, during June (JoAnn Martin), one at Townville, SC, June 29 & July 11 (Paul Shewmaker and Len Kopka), and one in Dillon County, SC, June 14 until early July (Lex Glover and Steve Patterson).

BOBOLINK: North Carolina had more summer reports this year. A pair nested successfully at Black Balsam, Haywood County, at an elevation of almost 6,000' (Bill & Norma Siebenheller). Also three males and two females were confirmed nesters at a site near Calvert, Transylvania County, in late June (Siebenhellers). This site had nesting previously, as in 1994. Also extremely unusual near the coast were one male east of Greenville June 19-20 (Ernie Marshall) and two males at the VOA-B, Pitt County area July 30 (John Wright). SHINY COWBIRD: A male was frequenting the feeder at the Ft. Fisher, NC, Aquarium from July 8 until at least July 11 (Paul Sykes, m. obs.). Also three were at the Savannah Spoil Site, Jasper County, SC, June 18 - 25, as noted by Steve Calver.

BALTIMORE ORIOLE: Good summer reports included a male seen carrying food at Lake Cunningham, Greenville County, SC, June 9 (Lex Glover) and at least three confirmed nestings in the Winston-Salem, NC, area (*fide* Ramona Snavely).

CBC Rare Bird Alert (704) 332-BIRD

Book Review: A Birder's Guide to the Bahamas (Including Turks and Caicos)

Anthony W. White. 1998. American Birding Association. Paper, wire-O binding. \$26.95.

Probably the first question to come to mind is why review a book on Bahamian avifauna in a journal about Carolina birds. There are a number of reasons this book is pertinent to the avifauna of the two Carolinas. First, a large percentage of our tropical pelagic seabird fauna is composed of species nesting in the Bahama archipelago. Secondly, nearly all our transient species are shared.

Thirdly, and most importantly, a great number of southeastern migrant birds winter in the Bahamas. Approximately 85% of the total 305 species which comprise the avifauna of the Bahamas is shared with the Carolinas. This shared fauna exceeds 260 species, and a great many of these species are birds which breed in the Carolinas and winter in the Bahamas in considerable numbers. Between 5.6 and 9.7 million North American migrants, many of these from the southeastern United States, winter in the pine forest of the Bahamas (Baham J. Sci 3:8-15). And, on San Salvador, for example, North American migrants make up 30 - 38% of the winter faunal assemblage. (J. Field Orn. 69:402 - 414.) A number of common woodland breeding species are also shared (Redtailed Hawks, Blue-gray Gnatcatchers, and Pine Warblers to name a few). In reality the region extending from the Carolinas southward through Georgia, Florida, the Bahamas, and the pine forest of eastern Cuba is a zoogeographic continuum, and for birds the fact that this region is interrupted by state lines and brief stretches of open water is irrelevant.

White's book is arranged as a bird finding guide. It is set up so that visitors going to any particular island will know where to go and what species they are likely to encounter. Obviously, local endemics and hard-to-find species get much of the attention, but readers also get a good review of each major island and specific plant communities. Because of the fragmented nature of the Bahamas archipelago and the remoteness of some island groups, the book is also a good reference for just the logistics of physically getting about the islands.

From an ornithological perspective, White's book is an important contribution. There have been few books on the birds of the Bahamas, and previous ones all suffered from the earlier authors' lack of familiarity with most of the island groups. It is clear that White has personally visited most of the

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islands and has first-hand experience with their faunas. The book also covers the Turk and Caicos Islands, islands which zoogeographically are part of the Bahamas, but politically are a different country. The total number of named islands, rocks and cays exceeds 1,000. Over a third of the 305 species of birds recorded from the 700 mile long archipelago breed there. White records four endemic species and thirty-four endemic subspecies. Additionally, a number of North American species reach their southern limits of breeding distributions, and many Greater Antillean birds reach their northern limits on islands barely 50 miles from the cost of the southeastern United States.

The book is comprised of an introductory chapter, 13 island guide chapters, an annotated list of specialities, a photo section of Bahamian birds (with many excellent photographs by Bruce Hallett), a chapter on other observable wildlife, a checklist of birds of the archipelago, and a good bibliography.

One can get a good idea of the type of information White provides in an article he prepared for *Birding* entitled, "Birding Southern Abaco" (Birding 30 (3):196 - 207). In fact, if you are going to the Bahamas to see birds and only plan to go once, Abcaco is my personal favorite. But even if you never plan to visit the Bahamas, from a Carolina perspective this book is worth having to get a feel for what the catbirds and kingfishers we see in the Carolinas do for the other seven months of their lives.

David Lee, North Carolina State Museum of Natural Sciences.

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Briefs for the Files		Ricky Davis			
Associate Editor		Andrea Ceselski			
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Cover (Downy Woodpecker) by Judy Mizell, Charlotte, NC.

Recent Breeding Range Expansion of the Cedar Waxwing in South-Central North Carolina:

Additional Information

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Lee and Hendrickson (1998) documented the breeding range expansion of the Cedar Waxwing (Bombycilla cedrorum) to the southeast Piedmont, Sandhills, and Coastal Plain of North Carolina in the 1980s and 1990s. Their paper did not document confirmed breeding from these regions for the counties on the South Carolina border. This note augments the information presented in Lee and Hendrickson (1998) by providing documentation for a confirmed breeding record of the Cedar Waxwing for the southeast Piedmont from Anson County, plus additional breeding-season information from Richmond (Sandhills) and Robeson (Coastal Plain) counties.

One pair of Cedar Waxwings nested on the property of Carolina Power and Light Company at Blewett Falls Lake Dam, Anson County, N.C., in 1994. The general habitat was a park-like area with picnic grounds and an expansive view of the lake. Four loblolly pine (*Pinus taeda*) trees were planted in a row along a gravel road near the tip of a peninsula that jutted out into the lake. On 15 June, I located the bulky grassy nest of a Cedar Waxwing. The nest was 13 m up in a 15.25 m pine. The nest was placed in the last sturdy crotch of an ascending limb, 0.6 m from the tip, and 3 m from the trunk. The nest was partially shaded by pine cones and was almost directly over the road.

The female Cedar Waxwing sat in the nest while the male sang occasionally from a nearby pine. From 1200-1315 hr, the female left the nest twice and foraged while the male consorted with her. The female returned and resumed sitting on the nest. I interpret these behaviors to indicate that the female was incubating eggs.

At the McKinney Lake Fish Hatchery, near Hoffman, Richmond County, N.C., I located three adult Cedar Waxwings from 7 June to 9 July 1988. The center of their activities was longleaf pine (P. palustris) woods that surrounded a rural yard adjacent to fish pools and a pond. I observed territorial behavior (persistent singing and courtship) among a pair of waxwings. On 25 June, an adult returned repeatedly to one place high in a pine, but I was unable to locate a nest or other direct breeding evidence.

At Richmond Community College, Hamlet, Richmond County, N.C., I located two adult Cedar Waxwings in an open grove of longleaf and loblolly pines next to a pond on 22 June 1989, but obtained no breeding evidence.

At the North Carolina Indian Cultural Center near Pembroke, Robeson County, N.C., I located one adult Cedar Waxwing in pines and cypress trees at the golf course alongside a cypress swamp on 17 June 1994, but I obtained no breeding evidence.

I provided a brief overview for the breeding range expansion of the Cedar Waxwing in the southeastern United States (McNair 1987). Nicholson (1997) and Lee and Hendrickson (1998) have provided much more detailed evaluations of the waxwing's numerical increase and breeding range expansion in Tennessee and North Carolina, respectively. These accounts complement each other. Both Nicholson (op. cit.) and Lee and Hendrickson (op. cit.) stated that nest-building behavior constituted confirmed breeding. Adults, however, may not finish nests or may abandon completed nests prior to egg-laying (cf., Witmer et al. 1997). I believe that the use of nest-building as a criterion for confirmed breeding is too permissive for a species expanding its breeding range.

Finally, Lee and Hendrickson (1998) overlooked that an adult Cedar Waxwing was reported feeding a nestling as late as 16 September (Duyck and McNair 1991), and a pair with dependent fledglings not fully grown was found as late as 14 October at Cashiers, N.C. (McNair 1987).

One caveat is that an extralimital breeding record of the Cedar Waxwing from the lower Coastal Plain of South Carolina (Rodgers and Post 1989) may not be valid (W. Post, pers. comm.). Thus, the breeding range expansion of the Cedar Waxwing into the South Carolina coastal plain may not be as rapid as suggested by Lee and Hendrickson (1998). The timing of this record is suspicious. The record occurred in 1968, 20-25 years prior to other breeding-season records of the Cedar Waxwing from the coastal plain of South Carolina or adjacent North Carolina (McNair and Post 1993, Lee and Hendrickson 1998, this paper). Furthermore, the nest site and general habitat was a large water oak (*Quercus niger*) in a suburban area. The characteristic nest sites and general breeding habitat of Cedar Waxwings in the coastal plain are large pines in open pinewoods in rural areas adjacent to bodies of water (Lee and Hendrickson 1998, this study).

Acknowledgments

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1998 Spring North American Migration Count in North Carolina

Dennis E. Burnette 4209 Bramlet Place Greensboro, NC 27407

The Spring North American Migration Count (NAMC) for 1998 was conducted on 9 May and included reports from North Carolina for the the fifth year. Reports from previous years may be found in earlier issues of *The* Chat. The traditional Christmas and spring bird counts with which many birders are familiar are conducted during a two- or three-week period. Conversely, the Spring NAMC is done on a single day, the second Saturday in May every year. This single-day approach allows an annual continent-wide approximation of where the neotropical migrants are.

Another way in which traditional Audubon-style counts differ from the NAMC is that they are restricted to a 15-mile circle. The NAMC is conducted by organizing volunteers to count birds in an entire county or province.

A concern that has been expressed by participants is that the standardized annual date can be as much as two weeks after many migrants have passed through some parts of North Carolina. It should be noted that the purpose of the count is not to determine how many migrants are in a state or province at the peak of migration but rather to identify the density and distribution of bird species throughout the whole continent north of Mexico at a given point in time. Therefore, some species are likely to be gone from some southern states and will not have arrived yet in other states and provinces further north.

The NAMC was begun in 1992 by Jim Stasz, a birder in Maryland who is attempting to determine the pattern of migration in North America. North Carolina has participated since 1994.

Participating Counties

Twenty-five counties of North Carolina's 100 counties reported migration counts in 1998. This is a nice increase from 18 counties in 1997. This year we had better representation from the diverse provinces of the state, although increased coverage of the coast and coastal plain regions would benefit the count. Counties included in this count are:

Mountain: Allegheny, Ashe, Avery, Buncombe, Cherokee, part of Cleveland, Henderson, and Transylvania.

Piedmont: Alamance, Catawba, Cleveland, Forsyth, Gaston, Guilford, Mecklenburg, Polk, Randolph, Wake, and Wilkes.

Sandhills: Part of Cumberland and Moore. Coastal Plain: Cumberland, Jones, and Pitt Coast: Brunswick, Dare, and Onslow.

Rarities, Species of Note, and High Counts

Many of the county coordinators reported species that are uncommon in their counties, unusually late or early, present in remarkable numbers, or of special interest to birders in the Carolinas. Most of the coordinators contributed good details on the more unusual sightings.

The weather was quite cooperative on count day this year, being described by some birders as "nearly perfect." (This is in stark contrast to last year, when the weather was cold and windy.) It was sunny to partly sunny across much of the state, with a light breeze. Temperatures ranged from the low 50s to the low 80s, with daytime temperatures in the mid to upper 70s in most counties.

Perhaps the weather influenced the numbers of neotropical migrants that were seen; several counties reported some species in the double and even triple digits. The number of lingering duck species and individuals, especially Redbreasted Mergansers, was interesting. Several surprises were reported, including Sandhill Cranes and a Golden Eagle.

A male Red-Breasted Merganser, seen at Farmer's Fish Camp Bridge on the New River, was not the only surprise in Allegheny County. A carefully-observed Black Tern, rare in the county, was observed circling over the New River near Piney Creek. Also of interest were a Barn Owl (increasingly hard to find in the state), a Black-billed Cuckoo (which was seen in the count week but not on count day), and 2 Golden-winged Warblers at a location where they may be breeding.

Ashe County produced a "Lawrence's" Blue-winged x Golden-winged Warbler hybrid near Todd, and a relatively high count of 14 Chestnut-sided Warblers. Ashe County also had several winter species that were late in leaving, including 2 Red-breasted Nuthatches, 10 Evening Grosbeaks, 9 Dark-eyed Juncos, and 23 Pine Siskins.

In the high mountains the Avery County count recorded, as usual, several species that would be considered winter birds in most of the state, including 2 Red-breasted Nuthatches, 2 Winter Wrens, 2 Ruby-crowned Kinglets, and 24 Pine Siskins.

Brunswick County reported several interesting species. Two Horned Grebes were spotted, one each in two different areas of the salt marsh at Sunset Beach, and an immature Northern Gannet was seen over the ocean off Ocean Isle Beach. A female or immature Bufflehead was at the Ocean Isle water treatment plant. Red-breasted Mergansers seem to have become regular at this time of year; 10 were reported (compared to 5 last year and 16 the year before), 3 in a

salt marsh at Ocean Isle Beach and 7 in a salt marsh at Sunset Beach. Six American Coots were reported, 4 on West Twin Lake in Sunset Beach, and 2 on the Calabash Creek in Sea Trail Plantation. Coots have lingered in the county as late as June for the past several years. Two Sharp-tailed Sparrows were seen in the salt marsh near 40th St. on Sunset Beach.

Buncombe County birders tallied several unusually high counts of neotropical migrants, including 50 Chestnut-sided Warblers, 52 Black-throated Blue Warblers, 25 Black-and-white Warblers, 54 Ovenbirds, 24 Hooded Warblers, 45 Scarlet Tanagers, and 80 Indigo Buntings. Birders there also reported 9 lingering American Coots.

Catawba County birders found a Common Loon on Lake Hickory, 2 Bluewinged Teal at Glenn Hilton Park, a Red-breasted Merganser below Oxford Dam on at Lake Lookout, and 3 Caspian Terns on Kiser Island Road, all uncommon in the county at this time of year. A roost of 24 Black Vultures near the county landfill was unusual. A Loggerhead Shrike, also near the landfill, was a good find. Observers spotted a lingering American Coot at Glenn Hilton Park (where coots reportedly sometimes stay through the summer), and 2 late Dark-eyed Juncos. A count of 110 Bobolinks is considered high for the county.

Cherokee County birders, who were quite some distance from water, spotted an out-of-place Double-crested Cormorant flying overhead.

In Cleveland County 2 male Dickcissels were found singing near Lattimore, where one had been seen last year. Also of interest were 4 White-crowned Sparrows spotted in the same feed lot where they have been found for the last several years.

Cumberland County had four species of lingering waterfowl, an American Black Duck (a species that has been reported nesting in the county), a Bluewinged Teal, a Ring-necked Duck, and 13 American Coots (in five groups). An unusually high count of 50 Great Crested Flycatchers also was reported from Cumberland.

The Dare County count, mostly from Cape Point and vicinity, is the first NAMC reported from North Carolina's Outer Banks and brings with it some interesting species that have been nonexistent or rare on the statewide spring count. Three Red-throated Loons were spotted flying across the point, and a Horned Grebe in alternate plumage was seen swimming in a shallow inlet. Of the 1002 Northern Gannets seen, only 2 were in clean, white, adult plumage showing yellow heads and black-tipped primaries. Roughly 800 were first-year brownish birds, and 200 were second-year birds. Ducks included 3 American Black Ducks and 2 Gadwalls (male and female) at a salt pond on the point, where 2 Piping Plovers were also spotted. A Swallow-tailed Kite was seen. Of two jaegers present, a Parasitic Jaeger was approximately 75 meters offshore,

and an unidentified jaeger being chased by two terms an hour later was too far away to discern plumage.

Forsyth County turned in the only report in the state of a lingering Yellow-bellied Sapsucker, which was on rural private property.

Guilford County birders spotted a Little Blue Heron (probably an injured bird), a good inland sighting at this time of year. A Yellow-crowned Night-Heron on a nest on the campus of UNCG was the only state record of this species during the count. A Ring-necked Duck and a Red-breasted Merganser lingered. Three Bald Eagles (2 adults and 1 immature) suggest that this species continues to nest at Lake Higgins. A Common Raven, rare in this Piedmont county and a significant sighting away from the mountains, was seen well on Pearman Quarry Road in Stokesdale, in the northwest corner of the county. A late Brown Creeper, not seen often in the county at any time, was spotted at the Piedmont Environmental Center. A Blue-winged Warbler was a good find.

Haywood County did not have an organized count, but Buncombe County birders passing through the Mt. Pisgah campground on count day noted an Olive-sided Flycatcher, an uncommon species that did not show up on any organized count.

Observers in Henderson County noted an early inland Great Egret, and reported the statewide count's only Peregrine Falcon. Of interest were a Willow Flycatcher, a species that has bred in the county, and a late Ruby-crowned Kinglet. High counts of several neotropical migrants were made, including 86 Red-eyed Vireos, 30 Chestnut-sided Warblers, 36 Blackpoll Warblers, 29 American Redstarts, 30 Ovenbirds, 42 Hooded Warblers, and 115 Indigo Buntings.

In Jones County a steady decline in egrets and herons was noted, possibly due to the lingering effects of Hurricane Fran. Birders did note 12 Cattle Egrets, one of only two counties reporting this species. Three American Coots remained in a farm pond from the large number just a month before. Three Rose-breasted Grosbeaks were unusual, while a good count of 20 Blue Grosbeaks somewhat offset the declining number of Indigo Buntings; and 6 White-throated Sparrow were unusually late for the county.

Mecklenburg County birders found two lingering duck species, a Gadwall and 2 Ruddy Ducks. Among land birds, a Ruby-crowned Kinglet and 5 White-throated Sparrows were of interest.

Birders in Moore County reported 5 Mute Swans, part of the feral population that has bred in the county for several years. Several lingering duck species included a Blue-winged Teal, an American Wigeon, 2 Red-breasted Mergansers found about 5 miles west of Vass, and 3 Ruddy Ducks. There was more evidence of the slow but steady increase in the state population of Bald Eagles, with 2 reported from the county. Of interest were 20 lingering American Coots,

and a good count of 70 American Pipits. Another bright spot was the count of 14 Loggerhead Shrikes, a declining species in the state. A Bachman's Sparrow was noted at Fort Bragg, one of only two counties reporting this geographically restricted species.

Onslow County counters found a white phase Snow Goose lingering again this year at Catherine's Lake, where a Snow Goose has been present for the last 7 winters, and had a good sighting of 2 Sandhill Cranes. The county seemed to be a haven for lingering duck species, which included 5 American Black Ducks at the Snead's Ferry sewage treatment ponds, probably part of a breeding population in the county; 11 Blue-winged Teal; 1 Northern Shoveler also at the sewage ponds; 2 Gadwalls; 11 Red-breasted Mergansers at two locations; 14 Ruddy Ducks; and 13 American Coots, also seen in two locations, one carrying what appeared to be nesting material. Among shorebirds seen, 2 Black-necked Stilts were found at a spoil site on Topsail Beach, and 4 White-rumped Sandpipers were seen at the sewage ponds. A single Black Tern was one of only two on the statewide count. Eurasian Collared Doves from the Topsail Island colony were displaced from Topsail Island to the mainland by the hurricanes of 1996; 3 were found this year. A good count of 12 Bachman's Sparrows were found at Camp Lejeune, and 2 Sharp-tailed Sparrows, not identified by the new species designation, were noted in a marsh at the end of Topsail Island.

Pitt County birders reported 1 lingering Ruddy Duck, and 4 Bald Eagles (1 adult and 3 immature) were spotted, always nice to see reported. Eight Henslow's Sparrows were seen, the only ones on the count, presumably at the Voice of America site, where they breed.

Polk County reported a high count of 104 Indigo Buntings.

Randolph County had two lingering sparrow species, a Swamp Sparrow (one of only three counties to note this species) and a White-throated Sparrow.

In Transylvania County an adult Golden Eagle, a species that is being reported with increasing frequency in the area, was seen well in the Cedar Mountain area near Jocassee Gorge. An American Coot stayed behind when the large flock at Connestee Falls left. The higher elevations again produced species that are thought of as winter birds in most of the state's counties, including a Red-breasted Nuthatch and a Golden-crowned Kinglet that were seen on the Blue Ridge Parkway, and 3 Winter Wrens, which are seen almost every year at higher elevations. Relatively high counts of neotropical migrants were recorded, including such highlights as 56 Blue-headed Vireos, 100 Redeyed Vireos, 71 Northern Parulas, 42 Chestnut-sided Warblers, 62 Ovenbirds, 113 Hooded Warblers, and 112 Indigo Buntings. Five White-throated Sparrows, 21 Dark-eyed Juncos, 1 Vesper Sparrow, and 2 Swamp Sparrows

were good sightings for the county at this time of year, and 6 Pine Siskins, which have bred in the county, were still coming to a feeder.

With 65 observers in the field, Wake County broke the NC record for participants in this county's first NAMC report. Some good birds were reported by the large crowd of birders. A Common Loon was considered unusual, and 62 Great Blue Herons were found, including birds in a nesting colony in the eastern part of the county. A Mute Swan, an increasingly common feral species, was tallied. Two Bald Eagles were seen, and 25 American Coots lingered. A good count of 70 Cliff Swallows was reported from two colonies in the county, one at Falls Lake Dam and another colony at the US 1 Neuse River bridge. Two Sedge Wrens, the only ones on the statewide count, were noted. Single Goldenwinged and Cerulean Warblers were uncommon, and a Wilson's Warbler was notable. Late in leaving were 5 Swamp Sparrows, 11 White-throated Sparrows, and 7 Rusty Blackbirds. A male Dickcissel was a good find at the NCSU agriculture fields.

Wilkes County birders spotted an Evening Grosbeak, a lingering Dark-eyed Junco, and 2 White-throated Sparrows.

Summary Data

The NAMC uses the following definitions for the four reporting categories: "regular" - observers move from one place to another within a relatively large part of a whole county during the period from dawn to dusk;

"night" (formerly "owling") - observers tally all species (not just owls) seen or heard from midnight until dawn and from dusk to midnight;

"stationary" - observers spend a significant amount of time from dawn until dusk at one observation point and count birds that move past; and

"feeder watching" - observers spend a minimum of one hour at one location counting birds that are attracted to a feeding station or stations, making an attempt to count the birds only once.

A total of 299 participants from 25 counties reported 58,186 individual birds (individuals by count categories: 2363 stationary, 1260 feeder, 54,349 regular, 214 night) of 228 species for the 1998 NAMC in North Carolina.

Parties/Observers: Stationary parties included 19 observers in 16 parties. Feeder Watching included 40 observers watching 53 feeding stations. Regular parties included 261 observers in 122 parties. Night parties included 21 observers in 17 parties.

Hours: Party hours for all categories totaled 1098:40. Stationary hours totaled 45:00. Feeder watching hours totaled 131:45. Regular party hours totaled 896:10 and included foot - 562:25, car - 290:30, boat - 21:30, ATV - 9:30, bicycle -2:00, golf cart - 5:00, other - 3:30, and mode of transportation not recorded - 1:45. Night hours totaled 25:45.

Miles: Party miles for all categories totaled 4066.7. Regular party miles totaled 4003.2, including 382.2 by foot, 3546.5 by car, 50 by boat, 9 by ATV, 6 by bicycle, 5.5 by golf cart, and 4 by other means. Night miles totaled 63.5

County Records

All data for individuals of each species reported below refer to regular party observations unless otherwise specified as night, stationary, or feeder watching data.

Alamance County, NC. (Piedmont)

0645 to 1115. Weather: not recorded. Stationary: none. Feeder Watching: none. Regular: 4 observers in 2 parties; regular hours foot 6:15; regular hours car 1:30; regular miles foot 2.25; regular miles car 20.0. Night: none.

County summary: 7:45 party hours; 22.25 party miles, 4 participants.

Green Heron 1, Wood Duck 1, Mallard 2, Black Vulture 3, Red-shouldered Hawk 1, Northern Bobwhite 2, Killdeer 6, Rock Dove 1, Mourning Dove 30, Barred Owl 2, Common Nighthawk 1, Chimney Swift 20, Ruby-throated Hummingbird 2, Red-bellied Woodpecker 3, Downy Woodpecker 1, Hairy Woodpecker 1, Eastern Wood Pewee 1, Acadian Flycatcher 1, Barn Swallow 10, Blue Jay 1, American Crow 10, Carolina Chickadee 26, Tufted Titmouse 20, White-breasted Nuthatch 1, Brown-headed Nuthatch 2, Carolina Wren 38, House Wren 1, Blue-gray Gnatcatcher 2, Eastern Bluebird 9, Wood Thrush 5, American Robin 49, Gray Catbird 1, Northern Mockingbird 11, Brown Thrasher 6, Cedar Waxwing 10, European Starling 20, Yellow-throated Vireo 2, Red-eyed Vireo 6, Northern Parula 1, Black-throated. Blue Warbler 1, Yellow-rumped Warbler 3, Pine Warbler 1, Prairie Warbler 2, American Redstart 2, Ovenbird 1, Common Yellowthroat 1, Yellow-breasted Chat 1, Summer Tanager 2, Scarlet Tanager 6, Northern Cardinal 36, Rose-breasted Grosbeak 1, Blue Grosbeak 2, Indigo Bunting 7, Eastern Towhee 4, Chipping Sparrow 1, Field Sparrow 2, Grasshopper Sparrow 2, Bobolink 80, Red-winged Blackbird 5, Eastern Meadowlark 5, Common Grackle 54, Brown-headed Cowbird 3, Orchard Oriole 1, Baltimore Oriole 1, House Finch 18, American Goldfinch 57, House Sparrow 1.

Total: 68 species, 613 individuals (0 stationary, 0 feeder, 613 regular, 0 night).

County Compiler: Bobby Mize, 1114 McPherson Rd., Burlington, NC 27215.

Participants: Steve Binkley, Nancy Hughes, Bobby Mize, Lynn Moseley.

Allegheny County, NC. (Mountains)

0500 to 2300. Weather: temperature 50° dawn, 55° noon, 60° dusk; wind 0 dawn, 5 mph noon, 5 mph dusk; clouds 100% dawn, 20% noon, 0% dusk; precipitation light rain dawn, none the remainder of the day. Stationary: none. Feeder watching: none. Regular: 8 observers, number of parties not recorded; regular hours foot 39:00; regular hours car 11:00; regular hours ATV 5; regular miles foot 25; regular miles car 130; regular miles ATV 5. Night: none.

County summary: 55 party hours; 160 party miles, 8 participants.

Great Blue Heron 2, Green Heron 2, Canada Goose 7, Wood Duck 3, Redbreasted Merganser 1, Black Vulture 2, Turkey Vulture 9, Sharp-shinned Hawk 1, Cooper's Hawk 1, Red-tailed Hawk 4, American Kestrel 2, Ruffed Grouse 1, Wild Turkey 11, Northern Bobwhite 1, Black Tern 1, Rock Dove 9, Mourning Dove 23, Common Barn Owl 1, Eastern Screech-owl 1, Chimney Swift 6, Ruby-throated Hummingbird 11, Belted Kingfisher 3, Red-bellied Woodpecker 5, Downy Woodpecker 3, Hairy Woodpecker 9, Northern Flicker 1, Pileated Woodpecker 3, Eastern Wood Pewee 8, Eastern Phoebe 3, Great Crested Flycatcher 3, Eastern Kingbird 11, Horned Lark 4, Tree Swallow 4, No. Rough-winged Swallow 3, Barn Swallow 49, Blue Jay 13, American Crow 46, Common Raven 6, Carolina Chickadee 14, Tufted Titmouse 15, White-breasted Nuthatch 5, Carolina Wren 11, House Wren 4, Ruby-crowned Kinglet 1, Bluegray Gnatcatcher 5, Eastern Bluebird 31, Wood Thrush 1, American Robin 51, Gray Catbird 5, Northern Mockingbird 5, Brown Thrasher 8, Cedar Waxwing 17, European Starling 35, White-eyed Vireo 2, Blue-headed Vireo 1, Yellowthroated Vireo 9, Warbling Vireo 5, Red-eyed Vireo 21, Golden-winged Warbler 2, Northern Parula 2, Yellow Warbler 11, Black-throated Blue Warbler 4, Yellow-rumped Warbler 21, Black-throated Green Warbler 1, Prairie Warbler 2, American Redstart 4, Ovenbird 2, Louisiana Waterthrush 1, Kentucky Warbler 1, Common Yellowthroat 7, Summer Tanager 1, Scarlet Tanager 14, Northern Cardinal 11, Rose-breasted Grosbeak 1, Blue Grosbeak 3, Indigo Bunting 34, Eastern Towhee 14, Chipping Sparrow 26, Field Sparrow 14, Song Sparrow 32, White-throated Sparrow 2, Dark-eyed Junco 2, Redwinged Blackbird 81, Eastern Meadowlark 3, Common Grackle 16, Brownheaded Cowbird 5, Orchard Oriole 5, Baltimore Oriole 10, House Finch 14, American Goldfinch 43, House Sparrow 4.

Total: 91 species, 907 individuals (0 stationary, 0 feeder, 907 regular, 0 night).

County Compiler: James H. Coman III, 9124 NC Hwy 93, Piney Creek, NC 28663.

Participants: Harrol Blevins, Velma Blevins, Opal Bryant, J. H. Coman Jr., James Coman III, Adelia Cox, Kenneth Cox, Katherine Higgins.

Avery County, NC. (Mountains)

0550 to 2150. Weather: temperature 40° predawn, 60° noon, 40° post-dusk; wind 1-2 mph predawn, 2 mph noon, 3-4 mph post-dusk; clouds 50% predawn, 80% noon, 10% post-dusk; precipitation about .5" PM. Stationary: none. Feeder watching: none. Regular: 1 observer in 1 party; regular hours foot 2:00; regular hours car 9:30, regular hours other 3:30; regular miles foot 3; regular miles car 90, regular miles other 4. Night: 1 observer in 1 party; night hours 1:30; night miles car 20.

County summary: 15:00 party hours; 97 party miles, 1 participant.

Great Blue Heron 3, Canada Goose 2, Wood Duck 11, Mallard 1, Turkey Vulture 3, Osprey 1, Cooper's Hawk 1, Broad-winged Hawk 1, Red-tailed Hawk 1, Ruffed Grouse 1, Wild Turkey 1, Northern Bobwhite 1, Killdeer 2, Solitary Sandpiper 3, Spotted Sandpiper 10, Mourning Dove 2, Chimney Swift 4, Ruby-throated Hummingbird 5, Belted Kingfisher 3, Red-bellied Woodpecker 1, Downy Woodpecker 1, Pileated Woodpecker 3, Eastern Wood Pewee 1, Eastern Phoebe 4, Tree Swallow 2, Northern Rough-winged Swallow 5, Barn Swallow 3, Blue Jay 10, American Crow 22, Carolina Chickadee 5, Tufted Titmouse 12, Red-breasted Nuthatch 2, White-breasted Nuthatch 1, Carolina Wren 7, House Wren 2, Winter Wren 2, Golden-crowned Kinglet 1, Ruby-crowned Kinglet 2, Eastern Bluebird 2, Veery 6, Wood Thrush 9, American Robin 13, Gray Catbird 3, Brown Thrasher 1, Cedar Waxwing 2, European Starling 8, Blue-headed Vireo 12, Red-eyed Vireo 11, Northern Parula 1. Yellow Warbler 2. Chestnut-sided Warbler 4. Black-throated Blue Warbler 8, Black-throated Green Warbler 5, Palm Warbler 1, Black-and-white Warbler 2, American Redstart 1, Worm-eating Warbler 1, Ovenbird 11, Common Yellowthroat 2, Hooded Warbler 14, Canada Warbler 7, Scarlet Tanager 9, Northern Cardinal 6, Indigo Bunting 9, Eastern Towhee 19, Chipping Sparrow 3, Song Sparrow 11, White-throated Sparrow 1, Dark-eyed Junco 19, Red-winged Blackbird 5, Eastern Meadowlark 3, Common Grackle 5, Brown-headed Cowbird 2, Pine Siskin 24, American Goldfinch 32. Total: 75 species, 416 individuals (0 stationary, 0 feeder, 416 regular, 0 night).

County Compiler: Margery R. Plymire, Box 306, Linville Falls, NC 28647. Participants: Rad Mayfield.

Brunswick County, NC. (Coast)

0400 to 2100. Weather: temperature 55° predawn, 58° dawn, 65° AM, 73° noon, 75° PM, 72° dusk, 66° post-dusk; wind light predawn, light dawn, 6 knots AM, 10 knots noon, 15 knots PM, 6 knots dusk, light post-dusk; clouds 10% AM, 10% noon, 40% PM, 40% dusk, 50%, post-dusk; precipitation none. Stationary: 2 observers in 2 parties; stationary hours 2:00. Feeder Watching: 2 observers watching 6 feeding stations; feeder watching hours 5:30. Regular: 15

observers in 10 parties; regular hours foot 16:30, regular hours car 34:00, regular hours boat 10:00, regular hours ATV 4:30, regular hours golf cart 5:00; regular miles foot 14; regular miles car 290.3; regular miles boat 22; regular miles ATV 4; regular miles golf cart 5.5. Night: 2 observers in 2 parties; night hours 7:00; night miles 1.

County summary: 74:00 party hours; 336.8 party miles, 15 participants.

Common Loon 1, Pied-billed Grebe 1, Horned Grebe 2, Northern Gannet 1, Brown Pelican 57, Double-crested Cormorant 46 (stationary 5, regular 41), Anhinga 6, Great Blue Heron 22, Great Egret 29, Snowy Egret 14, Little Blue Heron 4, Tricolored Heron 5, Cattle Egret 69, Green Heron 27, Black-crowned Night Heron 2, White Ibis 11, Canada Goose 38, Wood Duck 56 (stationary 25, regular 31), Mallard 17, Bufflehead 1, Red-breasted Merganser 10, Black Vulture 8, Turkey Vulture 51, Osprey 17, Sharp-shinned Hawk 1, Redshouldered Hawk 6, Broad-winged Hawk 1, Red-tailed Hawk 6, Buteo sp. 1, Wild Turkey 3, Northern Bobwhite 22, Clapper Rail 7, Common Moorhen 6, American Coot 6, Black-bellied Plover 39, Wilson's Plover 4, Semipalmated Plover 12, Killdeer 27, American Oystercatcher 21, Greater Yellowlegs 10, Lesser Yellowlegs 37, Solitary Sandpiper 14, Willet 64, Spotted Sandpiper 155, Whimbrel 37, Ruddy Turnstone 35, Red Knot 1241, Sanderling 13, Semipalmated Sandpiper 293, Least Sandpiper 40, Dunlin 209, Peep sp. 299, Short-billed Dowitcher 110, Laughing Gull 162, Bonaparte's Gull 3, Ringbilled Gull 34, Caspian Tern 1, Royal Tern 260, Sandwich Tern 70, Forster's Tern 29, Least Tern 64, Black Skimmer 123, Rock Dove 19, Mourning Dove 175 (stationary 2, feeder 9, regular 164), Yellow-billed Cuckoo 42, Great Horned Owl 2, Barred Owl 1, Common Nighthawk 7, Chuck-will's-widow 32 (stationary 2, regular 3, night 27), Whip-poor-will 3 (night 3), Chimney Swift 40, Ruby-throated Hummingbird 8 (feeder 2, regular 6), Belted Kingfisher 1, Red-headed Woodpecker 29 (feeder 3, regular 26), Red-bellied Woodpecker 36 (stationary 1, feeder 3, regular 32), Downy Woodpecker 7 (feeder 2, regular 5), Northern Flicker 20, Pileated Woodpecker 12, Eastern Wood Pewee 18, Acadian Flycatcher 31, Great Crested Flycatcher 87 (stationary 2, feeder 5, regular 80), Eastern Kingbird 41, Purple Martin 108, Tree Swallow 15, Northern Rough-winged Swallow 6, Barn Swallow 252, Blue Jay 65 (stationary 5, feeder 13, regular 47), American Crow 130, Fish Crow 22, Crow sp. 16 (stationary 1, regular 15), Carolina Chickadee 36 (feeder 6, regular 30), Tufted Titmouse 67 (stationary 1, feeder 11, regular 55), Brown-headed Nuthatch 39, Carolina Wren 60 (feeder 7, regular 53), Blue-gray Gnatcatcher 34, Eastern Bluebird 87 (stationary 8, regular 79), Wood Thrush 8, American Robin 16 (feeder 1, regular 15), Gray Catbird 7, Northern Mockingbird 112 (feeder 2, regular 108, night 2), Brown Thrasher 33 (feeder 2, regular 31), Loggerhead Shrike 10, European Starling 73, White-eyed Vireo 30, Yellow-throated Vireo 9, Red-eyed Vireo 29, Northern Parula 41, Yellow Warbler 4, Black-throated Blue Warbler 1, Black-throated Green Warbler 1, Blackburnian Warbler, Yellow-throated Warbler 18, Pine Warbler 42, Prairie Warbler 19, Blackpoll Warbler 2, Black-and-white Warbler 1, Prothonotary Warbler 41, Worm-eating Warbler 5, Swainson's Warbler 3, Ovenbird 15, Louisiana Waterthrush 4, Common Yellowthroat 28, Hooded Warbler 17, Yellow-breasted Chat 20, Summer Tanager 37, Scarlet Tanager 1, Northern Cardinal 132 (stationary 2, feeder 7, regular 123), Blue Grosbeak 34, Indigo Bunting 30, Painted Bunting 3, Eastern Towhee 49, Chipping Sparrow 24, Sharp-tailed Sparrow 2, White-throated Sparrow 1, Red-winged Blackbird 79, Eastern Meadowlark 14, Boattailed Grackle 186 (stationary 2, regular 184), Common Grackle 132, Brownheaded Cowbird 19 (feeder 2, regular 17), Blackbird sp. 4, Orchard Oriole 51 (stationary 2, regular 49), House Finch 4, House Sparrow 12.

Total: 138 species, 6912 individuals (58 stationary, 75 feeder, 6747 regular, 32 night).

County Compiler: Diane Hahn, 269 Sea Trail Dr., Sunset Beach, NC 28468. Participants: Sue Baer, Burt Bennett, Sue Bower, Josh Cox, Diane Hahn, David Harper, Marge Harper, Linda Hauser, Charlie Heacock, Betty Hewel, Bill Jordan, Sandy Jordan, Mary McDavit, Lynn Petch, Bernie Swanekamp.

Buncombe County, NC. (Mountains)

0630 to 1700. Weather: temperature 50° dawn, 55° AM, 60° noon, 65° PM; wind (Beaufort scale) 1 dawn, 1 AM, 2 noon, 1 PM; clouds 100% dawn, 100% AM, 75% noon, 40% PM; precipitation none. Stationary: 1 observer in 1 party; stationary hours 1. Feeder watching: none. Regular: 7 observers in 6 parties; regular hours foot 26:45; regular hours car 7:25; regular miles foot 12.75; regular miles car 162. Night: none.

County summary: 35:15 party hours; 174.75 party miles; 7 participants.

Common Loon 1, Double-crested Cormorant 6, Green Heron 2, Canada Goose 18, Wood Duck 1, Mallard 21, Turkey Vulture 18, Osprey 2, Broadwinged Hawk 2, Red-tailed Hawk 1, American Coot 9, Killdeer 3, Spotted Sandpiper 4, Ring-billed Gull 3, Rock Dove 5, Mourning Dove 29, Yellow-billed Cuckoo 1, Barred Owl 1, Chimney Swift 47, Ruby-throated Hummingbird 7 (stationary 1, regular 6), Belted Kingfisher 2, Red-bellied Woodpecker 17, Downy Woodpecker 14, Hairy Woodpecker 2, Northern Flicker 9, Pileated Woodpecker 7, Eastern Wood Pewee 6, Acadian Flycatcher 14 (stationary 1, regular 13), Eastern Phoebe 18 (stationary 1, regular 17), Great Crested Flycatcher 8, Eastern Kingbird 6, Tree Swallow 18, Northern Rough-winged Swallow 3, Barn Swallow 36, Blue Jay 30 (stationary 1, regular 29), American Crow 69, Common Raven 2, Carolina Chickadee 5, Tufted Titmouse 6 (stationary 1, regular 5), Carolina Wren 5, Blue-gray Gnatcatcher

6, Eastern Bluebird 13, Wood Thrush 16, American Robin 80, Gray Catbird 27, Northern Mockingbird 11, Brown Thrasher 12, Cedar Waxwing 1, European Starling 29, Blue-headed Vireo 21, Yellow-throated Vireo 17, Warbling Vireo 2, Red-eyed Vireo 86 (stationary 2, regular 84), Golden-winged Warbler 5, Northern Parula 21, Yellow Warbler 11, Chestnut-sided Warbler 50, Magnolia Warbler 2, Cape May Warbler 2, Black-throated Blue Warbler 52 (stationary 1, regular 51), Yellow-rumped Warbler 17, Black-throated Green Warbler 4, Blackburnian Warbler 2, Yellow-throated Warbler 3, Pine Warbler 13, Blackpoll Warbler 14, Black-and-white Warbler 25, American Redstart 12, Worm-eating Warbler 6, Ovenbird 54 (stationary 2, regular 52), Common Yellowthroat 5, Hooded Warbler 24, Wilson's Warbler 1, Canada Warbler 3, Yellow-breasted Chat 3, Scarlet Tanager 45 (stationary 1, regular 44), Northern Cardinal 39, Rose-breasted Grosbeak 34 (stationary 1, regular 33), Blue Grosbeak 1, Indigo Bunting 80 (stationary 1, regular 79), Eastern Towhee 48 (stationary 1, regular 47), Chipping Sparrow 21, Field Sparrow 9, Grasshopper Sparrow 1, Song Sparrow 55, Dark-eyed Junco 17, Bobolink 25, Red-winged Blackbird 11, Eastern Meadowlark 4, Common Grackle 13, Orchard Oriole 3, Baltimore Oriole 4, House Finch 4, American Goldfinch 67, House Sparrow 5.

Total: 95 species, 1594 individuals (14 stationary, 0 feeder, 1580 regular, 0 night).

County Compiler: Ruth E. Young, P.O. Box 836, Fairview, NC 28730.

Participants: Edward Caldwell, Emilie Gardner, Peggy Lasher, Len Pardue, Linda Pyeritz, Rick Pyeritz, Ruth Young.

Catawba County, NC. (Piedmont)

0500 to 2130. Weather: temperature 54° predawn, 72° AM, 82° PM, 63° postdusk; wind 0 predawn, 0 AM, 1- 5 mph PM, 1-5 mph post-dusk; clouds 0 predawn, 0 AM, 20% PM, 50% post-dusk; precipitation none. Stationary: none. Feeder watching: 2 observers watching 2 feeding stations; hours feeder watching 4:30. Regular: 9 observers in 3 parties; regular hours foot 30:55, regular hours car 5:35, regular hours boat 2:30; regular miles foot 28.7; regular miles car 175, regular miles boat 10. Night: 4 observers in 1 party; night hours 2:00; night miles 0.

County summary: 45:30 party hours; 213.7 party miles; 11 participants.

Common Loon 1, Double-crested Cormorant 23, Great Blue Heron 5, Green Heron 3, Canada Goose 22, Wood Duck 1, Mallard 38, Blue-winged Teal 2, Red-breasted Merganser 5, Black Vulture 38, Turkey Vulture 20, Osprey 4, Red-shouldered Hawk 3, Broad-winged Hawk 2, Red-tailed Hawk 14, American Kestrel 1, Northern Bobwhite 2, American Coot 1, Killdeer 22, Ringbilled Gull 23, Caspian Tern 3, Rock Dove 50, Mourning Dove 162 (feeder 26, regular 136), Yellow-billed Cuckoo 1, Eastern Screech-owl 7 (night 7), Great

Horned Owl 1 (night 1), Chuck-will's-widow 1 (night 1), Whip-poor-will 5 (night 5), Chimney Swift 173, Ruby-throated Hummingbird 1, Belted Kingfisher 7, Red-bellied Woodpecker 20 (feeder 1, regular 19), Downy Woodpecker 7, Northern Flicker 7, Pileated Woodpecker 5, Eastern Wood Pewee 1, Eastern Phoebe 20, Great Crested Flycatcher 2, Eastern Kingbird 26, Purple Martin 42, Northern Rough-winged Swallow 14, Barn Swallow 69, Blue Jay 67, American Crow 102, Carolina Chickadee 21 (feeder 2, regular 19), Tufted Titmouse 26 (feeder 2, regular 24), White-breasted Nuthatch 1, Brownheaded Nuthatch 4, Carolina Wren 36 (feeder 2, regular 34), House Wren 3, Blue-gray Gnatcatcher 15, Eastern Bluebird 99, Wood Thrush 3, American Robin 301 (feeder 40, regular 246, night 15), Gray Catbird 4, Northern Mockingbird 82, Brown Thrasher 20 (feeder 1, regular 19), Cedar Waxwing 102, Loggerhead Shrike 1, European Starling 175, White-eyed Vireo 1, Blueheaded Vireo 1, Red-eyed Vireo 21, Northern Parula 7, Yellow Warbler 5, Yellow-rumped Warbler 10, Pine Warbler 10, Prairie Warbler 4, Bay-breasted Warbler 1, Blackpoll Warbler 1, Black-and-white Warbler 1, American Redstart 4, Common Yellowthroat 7, Scarlet Tanager 2, Northern Cardinal 105 (feeder 30, regular 75), Blue Grosbeak 9, Indigo Bunting 27 (feeder 6, regular 21), Eastern Towhee 21 (feeder 2, regular 18, night 1), Chipping Sparrow 11 (feeder 2, regular 9), Field Sparrow 14, Grasshopper Sparrow 5, Song Sparrow 16 (feeder 2, regular 14), White-throated Sparrow 2, Dark-eyed Junco 2, Bobolink 110, Red-winged Blackbird 22, Eastern Meadowlark 56, Common Grackle 270 (feeder 26, regular 244), Brown-headed Cowbird 10 (feeder 3, regular 7), American Goldfinch 233 (feeder 1, regular 232), House Sparrow 7.

Total: 95 species, 2938 individuals (0 stationary, 156 feeder, 2752 regular, 30 night).

County Compilers: Dwayne & Lori Martin, 3691 Jinny Lane, Claremont, NC 28610.

Participants: Domonick D'Ostilio, Emma D'Ostilio, Dot Edmondson, Linda Gilbert, Todd Gilbert, Adam Martin, Dwayne Martin, Lori Martin, Phyllis Martin, John Worm, Kate Worm.

Cherokee County, NC. (Mountains)

0730 to 1630. Weather: temperature 56° AM, 72° noon, 76° PM, 65° postdusk; wind 0-5 mph AM, 0-5 mph noon, 5-10 mph PM, 0-5 mph post-dusk; clouds 75% AM, 80% noon, 65% PM; Precipitation: none. Stationary: none. Feeder watching: none. Regular: 4 observers in 1 party; regular hours foot 7:00; regular hours car 2:00; regular miles foot 4.5; regular miles car 35. Night: 2 observers in 1 party; night hours 0:30, night miles 0.

County summary: 9:30 party hours; 39.5 party miles, 4 participants.

Double-crested Cormorant 1, Canada Goose 9, Turkey Vulture 2, Cooper's Hawk 1, Broad-winged Hawk 2, Red-tailed Hawk 1, American Kestrel 1, Northern Bobwhite 6, Rock Dove 10, Mourning Dove 18, Eastern Screech-owl 2 (night 2), Barred Owl 2 (night 2), Chimney Swift 12, Ruby-throated Hummingbird 6, Belted Kingfisher 1, Red-bellied Woodpecker 7, Downy Woodpecker 1, Northern Flicker 7, Pileated Woodpecker 6, Eastern Wood Pewee 4, Eastern Phoebe 19, Great Crested Flycatcher 4, Eastern Kingbird 2, Purple Martin 14, Northern Rough-winged Swallow 6, Cliff Swallow 6, Barn Swallow 50, Blue Jay 26, American Crow 36, Carolina Chickadee 11, Tufted Titmouse 29, White-breasted Nuthatch 4, Brown-headed Nuthatch 1, Carolina Wren 27, Blue-gray Gnatcatcher 2, Eastern Bluebird 13, Wood Thrush 4, American Robin 28, Gray Catbird 7, Northern Mockingbird 5, Brown Thrasher 14, Cedar Waxwing 6, European Starling 24, White-eyed Vireo 1, Blue-headed Vireo 9, Yellow-throated Vireo 2, Red-eyed Vireo 8, Northern Parula 6, Yellow Warbler 1, Cape May Warbler 1, Yellow-rumped Warbler 3, Pine Warbler 6, Bay-breasted Warbler 1, Blackpoll Warbler 1, Black-and-white Warbler 2, Ovenbird 14, Kentucky Warbler 1, Common Yellowthroat 2, Hooded Warbler 6, Yellow-breasted Chat 7, Scarlet Tanager 4, Northern Cardinal 19, Rosebreasted Grosbeak 3, Indigo Bunting 27, Eastern Towhee 21, Chipping Sparrow 8, Field Sparrow 4, Song Sparrow 56, Red-winged Blackbird 15, Eastern Meadowlark 7, Common Grackle 18, Brown-headed Cowbird 5, Orchard Oriole 2, Baltimore Oriole 1, House Finch 15, American Goldfinch 4, House Sparrow 6.

Total: 77 species, 723 individuals (0 stationary, 0 feeder, 719 regular, 4 night).

County Compilers: Bill Bolte and Jan Bolte, Rt. 2, Box 175A, Murphy, NC 28906.

Participants: Bill Bolte, Jan Bolte, Fred Roth, Marie Roth.

Cleveland County, NC. (Mountains and Piedmont)

0700 to 1625. Weather: temperature 56° dawn, 66° AM, 73° noon, 72° PM, 71° dusk; wind calm dawn, 3-5 mph AM, NW 15 mph noon, S 5 PM, S5 dusk; clouds clear dawn, clear AM, 25% noon, 50% PM, 100% dusk; precipitation none. Stationary: none. Feeder watching: none. Regular: 2 observers in 1 party; regular hours foot 1:00; regular hours car 8:00; regular miles foot 1; regular miles car 77.5. Night: none.

County summary: 9:00 party hours; 78.5 party miles, 2 participants.

Canada Goose 19, Mallard 12, Turkey Vulture 6, Cooper's Hawk 1, Redtailed Hawk 6, American Kestrel 3, Northern Bobwhite 9, Killdeer 11, Solitary Sandpiper 5, Spotted Sandpiper 3, Ring-billed Gull 1, Rock Dove 16, Mourning Dove 49, Yellow-billed Cuckoo 2, Chimney Swift 64, Belted Kingfisher 3,

Red-bellied Woodpecker 3, Downy Woodpecker 1, Northern Flicker 1, Pileated Woodpecker 1, Eastern Wood Pewee 3, Eastern Phoebe 9, Great Crested Flycatcher 3, Eastern Kingbird 12, Horned Lark 1, Purple Martin 33, Northern Rough-winged Swallow 4, Barn Swallow 27, Blue Jay 12, American Crow 35, Carolina Chickadee 1, Tufted Titmouse 2, Brown-headed Nuthatch 3, Carolina Wren 12, Blue-gray Gnatcatcher 5, Eastern Bluebird 42, American Robin 44, Gray Catbird 2, Northern Mockingbird 47, Brown Thrasher 11, Cedar Waxwing 26, Loggerhead Shrike 2, European Starling 97, White-eyed Vireo 4, Red-eyed Vireo 8, Yellow Warbler 5, Yellow-rumped Warbler 3, Pine Warbler 4, Prairie Warbler 2, Common Yellowthroat 11, Yellow-breasted Chat 7, Scarlet Tanager 2, Northern Cardinal 20, Blue Grosbeak 11, Indigo Bunting 17, Dickcissel 2, Eastern Towhee 4, Chipping Sparrow 5, Field Sparrow 10, Grasshopper Sparrow 1, Song Sparrow 5, White-crowned Sparrow 4, Bobolink 60, Red-winged Blackbird 8, Eastern Meadowlark 24, Common Grackle 66, Brown-headed Cowbird 3, Orchard Oriole 2, Baltimore Oriole 1, House Finch 12, American Goldfinch 6, House Sparrow 12. Total: 72 species, 968 individuals (0 stationary, 0 feeder, 968 regular, 0 night).

County Compiler: Jo Ann Martin, P.O. Box 242, Ellenboro, NC 28040. Participants: Jacquie Brunnick, Jo Ann Martin.

Cumberland County, NC. (Coastal Plain)

0430 to 2030. Weather: temperature 58° predawn, 56° dawn, 70° AM, 80° noon, 80° PM, 70° dusk, 70° post-dusk; wind 0 predawn, 0 dawn, NW 10 mph AM, NW 10 mph noon, NW 20 mph PM, NW 10 mph dusk, 0 post-dusk; clouds 0 predawn, 0 dawn, 30% AM, 50% noon, 90% PM, 20% dusk, 0 post-dusk; precipitation none. Stationary: 2 observer in 1 party; stationary hours 1:00. Feeder Watching: none. Regular: 5 observers in 4 parties; regular hours foot 10:15; regular hours car 12:15; regular miles foot 7; regular miles car 146. Night: 1 observer in 1 party; hours night 1:00, miles night 18.

County summary: 24:30 party hours; 171 party miles, 7 participants.

Pied-billed Grebe 1, Double-crested Cormorant 15 (stationary 1, regular 14), Great Blue Heron 2 (regular 1, night 1), Green Heron 3, Canada Goose 141 (stationary 21, regular 118, night 2), Wood Duck 15 (stationary 2, regular 13), American Black Duck 1, Mallard 23 (stationary 7, regular 16), Blue-winged Teal 1, Ring-necked Duck 1, Turkey Vulture 8, Osprey 3, Cooper's Hawk 1, Red-shouldered Hawk 5, Red-tailed Hawk 5, Northern Bobwhite 4, American Coot 13, Killdeer 21, Greater Yellowlegs 2, Lesser Yellowlegs 9, Solitary Sandpiper 6, Willet 6, Least Sandpiper 3, Rock Dove 5, Mourning Dove 104 (stationary 7, regular 97), Yellow-billed Cuckoo 6, Eastern Screech-owl 1 (night 1), Barred Owl 1, Common Nighthawk 1 (night 1), Chuck-will's-widow 1 (night 1), Whip-poor-will 1 (night 1), Chimney Swift 51 (stationary 2, regular

49), Ruby-throated Hummingbird 2, Belted Kingfisher 2, Red-headed Woodpecker 3, Red-bellied Woodpecker 14 (stationary 1, regular 13), Downy Woodpecker 1, Northern Flicker 3, Pileated Woodpecker 5, Eastern Wood Pewee 15, Acadian Flycatcher 10, Eastern Phoebe 5, Great Crested Flycatcher 56, Eastern Kingbird 33, Purple Martin 18, Tree Swallow 12, Northern Roughwinged Swallow 9, Barn Swallow 55, Blue Jay 20 (stationary 1, regular 19), American Crow 58), Fish Crow 24 (stationary 4, regular 20), Crow sp. 25, Carolina Chickadee 15, Tufted Titmouse 68 (stationary 5, regular 63), Brownheaded Nuthatch 9 (stationary 2, regular 7), Carolina Wren 73, Blue-gray Gnatcatcher 6, Eastern Bluebird 103, Wood Thrush 16, American Robin 54 (regular 42, night 12), Gray Catbird 17 (stationary 1, regular 12, night 4), Northern Mockingbird 106 (regular 97, night 9), Brown Thrasher 21 (stationary 1, regular 20), Loggerhead Shrike 4, European Starling 90 (stationary 1, regular 89), White-eyed Vireo 4, Yellow-throated Vireo 5, Red-eyed Vireo 18, Northern Parula 3, Yellow Warbler 1, Black-throated Blue Warbler 3, Yellowthroated Warbler 7, Pine Warbler 12, Prairie Warbler 11, Blackpoll Warbler 2, Black-and-white Warbler 2, American Redstart 7, Prothonotary Warbler 14, Swainson's Warbler 1, Ovenbird 3, Louisiana Waterthrush 4, Kentucky Warbler 1, Common Yellowthroat 7, Hooded Warbler 1, Yellow-breasted Chat 1, Summer Tanager 13, Northern Cardinal 88 (stationary 7, regular 78, night 3), Rose-breasted Grosbeak 1, Blue Grosbeak 34, Indigo Bunting 29, Eastern Towhee 48 (stationary 1, regular 42, night 5), Chipping Sparrow 11, Field Sparrow 2, Savannah Sparrow 1, Bobolink 33, Red-winged Blackbird 61, Eastern Meadowlark 37, Common Grackle 204 (stationary 7, regular 197), Brown-headed Cowbird 14, Orchard Oriole 18, Baltimore Oriole 1, House Finch 30 (stationary 4, regular 26), American Goldfinch 5, House Sparrow 24 (regular 21, night 3).

Total: 103 species, 2175 individuals (75 stationary, 0 feeder, 2057 regular, 43 night).

County Compiler: Philip J. Crutchfield, 5559 Hedrick Dr., Fayetteville, NC 28303.

Participants: Dorothy Crutchfield, Jim Crutchfield, Philip Crutchfield, Jarvis Hudson, Louis Pulsipher, Susan Pulsipher, Tom Shaw.

Dare County, NC. (Coast)

0530 to 1400. Weather: temperature 70° predawn, 70° dawn, 75° AM, 80° noon, 85° PM, 85° dusk, 80° post-dusk; wind NW 15 throughout the day; clouds none; precipitation none. Stationary: 1 observers in 1 party; stationary hours 6:00. Feeder watching: none. Regular: 1 observer in 1 party; regular hours foot 3:00, regular hours car 1:00; regular miles foot 3; regular miles car 35. Night: 1 observers in 1 party; night hours 0:30; night miles 2.

County summary: 10:30 party hours; 40 party miles, 1 participant.

Red-throated Loon 3 (stationary 3), Common Loon 221 (stationary 216, regular 5), Horned Grebe 1 (stationary 1), Northern Gannet 1002 (stationary 1002), Brown Pelican 15 (stationary 15), Double-crested Cormorant 69 (stationary 69), Great Egret 5, Little Blue Heron 1, Green Heron 3, American Black Duck 3, Mallard 13, Gadwall 2, Turkey Vulture 1 (stationary 1), Osprey 14 (stationary 10, regular 4), Swallow-tailed Kite 1, Black-bellied Plover 20 (stationary 16, regular 4), Semipalmated Plover 3 (stationary 3), Piping Plover 2, American Oystercatcher 2 (stationary 2), Greater Yellowlegs 2, Lesser Yellowlegs 1, Willet 10, Spotted Sandpiper 5, Ruddy Turnstone 16 (stationary 14, regular 2), Red Knot 23 (stationary 1, regular 22), Sanderling 33 (stationary 33), Semipalmated Sandpiper 8, Least Sandpiper 5, Dunlin 35 (stationary 1, regular 34), Peep sp. 125, Short-billed Dowitcher 6, Parasitic Jaeger 1 (stationary 1), Jaeger sp. 1 (stationary 1), Laughing Gull 142 (stationary 115, regular 27), Ring-billed Gull 2 (stationary 2), Herring Gull 12 (stationary 12), Great Black-backed Gull 46 (stationary 29, regular 17), Royal Tern 114 (stationary 114), Sandwich Tern 7 (stationary 7), Common Tern 68 (stationary 68), Least Tern 39 (stationary 39), Mourning Dove 7, Common Nighthawk 2, Chuck-will's-widow 6 (night 6), Chimney Swift 2 (stationary 2), Ruby-throated Hummingbird 2 (stationary 1, regular 1), Northern Flicker 1, Empidonax sp. 1 (stationary 1), Great Crested Flycatcher 4 (regular 3, night 1), Eastern Kingbird 1, Purple Martin 4 (regular 2, night 2), Tree Swallow 1, Northern Roughwinged Swallow 3, Barn Swallow 16 (stationary 3, regular 13), Blue Jay 8, Fish Crow 5, Carolina Wren 13 (regular 8, night 5), Northern Mockingbird 6 (regular 4, night 2), European Starling 2, White-eyed Vireo 1, Prairie Warbler 4, Common Yellowthroat 2, Northern Cardinal 18 (regular 15, night 3), Blue Grosbeak 1, Eastern Towhee 3, Red-winged Blackbird 10, Eastern Meadowlark 2, Boat-tailed Grackle 5 (stationary 5), Common Grackle 69 (stationary 3, regular 66), Brown-headed Cowbird 3, House Sparrow 8 (regular 6, night 2). Total: 69 species, 2292 individuals (1790 stationary, 0 feeder, 481 regular,

21 night).

County Compiler: Joshua S. Rose, 922 Dacien St. Durham, NC 27701

County Compiler: Joshua S. Rose, 922 Dacien St., Durham, NC 27701. Participants: Josh Rose.

Forsyth County, NC. (Piedmont)

Starting and stopping times not recorded. Weather not recorded. Stationary: none. Feeder watching: 2 observers watching 2 feeding stations; hours feeder watching 0:30. Regular: 2 observers in 2 parties; regular hours 1:45; mode of transportation not recorded; regular miles not recorded. Night: none.

County summary: 2:15 party hours; party miles not recorded; 4 participants.

Canada Goose 12, Turkey Vulture 3, Red-tailed Hawk 1, Mourning Dove 18 (feeder 13, regular 5), Yellow-billed Cuckoo 1, Common Nighthawk 5, Chimney Swift 4, Ruby-throated Hummingbird 4 (feeder 2, regular 2), Redbellied Woodpecker 1, Yellow-bellied Sapsucker 1, Hairy Woodpecker 1, Barn Swallow 2 (feeder 2), Blue Jay 7 (feeder 5, regular 2), American Crow 2, Carolina Chickadee 5 (feeder 2, regular 3), Tufted Titmouse 4 (feeder 2, regular 2), White-breasted Nuthatch 2 (feeder 1, regular 1), Carolina Wren 1, House Wren 1, Eastern Bluebird 6 (feeder 4, regular 2), Veery 1, Wood Thrush 2, American Robin 8 (feeder 4, regular 4), Northern Mockingbird 3, Brown Thrasher 1 (feeder 1), Cedar Waxwing 9, European Starling 29 (feeder 24, regular 5), Yellow Warbler 1, Black-throated Blue Warbler 2, Pine Warbler 2, Common Yellowthroat 2, Summer Tanager 2, Northern Cardinal 11 (feeder 7, regular 4), Blue Grosbeak 3 (feeder 1, regular 2), Indigo Bunting 7 (feeder 3, regular 4), Eastern Towhee 2 (feeder 2), Chipping Sparrow 1, Field Sparrow 2 (feeder 2), Song Sparrow 2 (feeder 2), White-throated Sparrow 2, Eastern Meadowlark 1 (feeder 1), Common Grackle 10 (feeder 7, regular 3), Orchard Oriole 2, House Finch 3 (feeder 3), American Goldfinch 8 (feeder 8).

Total: 46 species, 202 individuals (0 stationary, 101 feeder, 101 regular, 0 night).

County Compilers: Linda Davis, 4537 Thacker Hill Dr., Winston-Salem, NC 27106.

Participants: Linda Davis, Dolores Foutch, Wally Foutch, Marilyn Shuping.

Gaston County, NC. (Piedmont)

0600 to 1800. Weather: temperature 60° predawn, 62° AM, 68° noon; wind 1-3 mph predawn, 3-6 mph AM, 7-12 mph noon; clouds 5% predawn, 0 AM, 0 noon; precipitation none. Stationary: none. Feeder watching: 2 observers watching 6 feeding stations; hours feeder watching 3:00. Regular: 5 observers in 2 parties; regular hours foot 10:00, regular hours car 1:00; regular miles foot 5.5; regular miles car 35. Night: not reported.

County summary: 14:00 party hours; 40.5 party miles; 6 participants.

Double-crested Cormorant 3, Great Blue Heron 1, Green Heron 2, Canada Goose 9, Mallard 2, Black Vulture 2, Turkey Vulture 9, Osprey 1, Red-tailed Hawk 3, American Kestrel 1, Northern Bobwhite 2, Killdeer 6, Rock Dove 10, Mourning Dove 47 (feeder 17, regular 30), Yellow-billed Cuckoo 2, Eastern Screech-owl 1 (night 1), Barred Owl 2 (night 2), Whip-poor-will 1, Chimney Swift 12, Ruby-throated Hummingbird 11 (feeder 3, regular 8), Belted Kingfisher 3, Red-bellied Woodpecker 15 (feeder 5, regular 10), Downy Woodpecker 10 (feeder 4, regular 6), Hairy Woodpecker 1, Northern Flicker 3, Pileated Woodpecker 3, Eastern Wood Pewee 3, Acadian Flycatcher 1, Eastern Phoebe 2, Great Crested Flycatcher 2, Eastern Kingbird 1, Purple

Martin 29, Barn Swallow 5, Blue Jay 19 (feeder 4, regular 15), American Crow 12, Carolina Chickadee 28 (feeder 6, regular 22), Tufted Titmouse 15 (feeder 6, regular 9), White-breasted Nuthatch 9 (feeder 4, regular 5), Brown-headed Nuthatch 4 (feeder 1, regular 3), Carolina Wren 18, Blue-gray Gnatcatcher 8, Eastern Bluebird 17 (feeder 2, regular 15), Wood Thrush 2, American Robin 26, Gray Catbird 3, Northern Mockingbird 16, Brown Thrasher 11 (feeder 1, regular 10), Cedar Waxwing 14, European Starling 38, White-eyed Vireo 1, Blue-headed Vireo 2, Red-eyed Vireo 10, Northern Parula 1, Yellow Warbler 2, Black-throated Blue Warbler 2, Yellow-rumped Warbler 4, Pine Warbler 5, Blackpoll Warbler 3, Black-and-white Warbler 2, American Redstart 5, Ovenbird 3, Northern Waterthrush 1, Common Yellowthroat 3, Summer Tanager 5, Scarlet Tanager 6, Northern Cardinal 40 (feeder 16, regular 24), Rose-breasted Grosbeak 9 (feeder 5, regular 4), Indigo Bunting 8 (feeder 2, regular 6), Eastern Towhee 12 (feeder 4, regular 8), Chipping Sparrow 13 (feeder 5, regular 8), Red-winged Blackbird 3, Eastern Meadowlark 3, Common Grackle 46 (feeder 13, regular 33), Brown-headed Cowbird 11 (feeder 4, regular 7), Baltimore Oriole 1, House Finch 22 (feeder 11, regular 11), American Goldfinch 55 (feeder 14, regular 41), House Sparrow 8.

Total: 78 species, 731 individuals (0 stationary, 127 feeder, 601 regular, 3 night).

County Compilers: Lamar Ashe, 733 Forest Brook Dr., Gastonia, NC 28056. Participants: Brenda Ashe, Lamar Ashe, Duane Crane, Tony Goff, Bobby Hackney, Scott Hudson.

Guilford County, NC. (Piedmont)

0530 to 1900. Weather: temperature 59° predawn, 60° dawn, 76° AM, 76° noon, 75° PM, 70° dusk; wind W 7 mph predawn, W 7 mph dawn, W 9 mph PM; clouds 90% predawn, 100% dawn, 30% AM, 100% noon, 95% PM; precipitation: none. Stationary: 1 observer in 1 party; stationary hours 3:30. Feeder Watching: 6 observers watching 7 feeding stations; feeder watching hours 19:45. Regular: 24 observers in 11 parties; regular hours foot 53:45; regular hours car 25:20; regular hours bicycle 2:00; regular miles foot 24.5; regular miles car 392.5; regular hours bicycle 6. Night: none.

County summary: 129:15 party hours; 572.7 party miles, 28 participants. Pied-billed Grebe 1, Horned Grebe 1, Double-crested Cormorant 26, Great Egret 9, Little Blue Heron 1, Green Heron 16, Yellow-crowned Night Heron 1, Canada Goose 457, Wood Duck 24, Mallard 231, Blue-winged Teal 5, Ringnecked Duck 1, Red-breasted Merganser 2, Black Vulture 2, Turkey Vulture 45, Osprey 2, Bald Eagle 3 (adult 2, imm. 1), Sharp-shinned Hawk 1, Cooper's Hawk 2, Accipitor sp. 1, Red-shouldered Hawk 6, Broad-winged Hawk 1, Redtailed Hawk 24 (stationary 2, regular 22), American Kestrel 1, Northern

Bobwhite 12, American Coot 1, Killdeer 26, Spotted Sandpiper 14, Ring-billed Gull 3, Rock Dove 45, Mourning Dove 263 (stationary 1, feeder 25, regular 237), Yellow-billed Cuckoo 3, Eastern Screech-owl 1, Great Horned Owl 1, Barred Owl 1, Common Nighthawk 1, Chimney Swift 193 (stationary 4, feeder 1, regular 188), Ruby-throated Hummingbird 11 (feeder 4, regular 7), Belted Kingfisher 11, Red-headed Woodpecker 2, Red-bellied Woodpecker 68 (stationary 2, feeder 1, regular 65), Downy Woodpecker 28 (stationary 4, regular 24), Hairy Woodpecker 2), Northern Flicker 23 (stationary 2, feeder 2, regular 19), Pileated Woodpecker 7, Eastern Wood Pewee 16 (stationary 1, regular 15), Acadian Flycatcher 7, Empidonax sp. 1, Eastern Phoebe 22 (stationary 1, regular 21), Great Crested Flycatcher 34, Eastern Kingbird 58, Horned Lark 2, Purple Martin 102, Tree Swallow 1, Northern Rough-winged Swallow 8, Bank Swallow 1, Barn Swallow 124, Blue Jay 185 (stationary 1, feeder 14, regular 170), American Crow 300 (stationary 4, feeder 6, regular 290), Fish Crow 6, Common Raven 1, Carolina Chickadee 143 (feeder 8, regular 135), Tufted Titmouse 118 (feeder 10, regular 108), White-breasted Nuthatch 21 (feeder 5, regular 16), Brown-headed Nuthatch 20 (feeder 1, regular 19), Brown Creeper 1, Carolina Wren 144 (feeder 2, regular 142), House Wren 17, Blue-gray Gnatcatcher 51, Eastern Bluebird 131 (feeder 2, regular 129), Veery 1, Swainson's Thrush 23, Wood Thrush 70 (feeder 1, regular 69), American Robin 458 (stationary 1, feeder 7, regular 450), Gray Catbird 43, Northern Mockingbird 175 (feeder 2, regular 173), Brown Thrasher 52 (feeder 2, regular 50), Cedar Waxwing 148, European Starling 373, Whiteeyed Vireo 5, Blue-headed Vireo 4, Yellow-throated Vireo 2, Red-eyed Vireo 97, Blue-winged Warbler 1, Northern Parula 22, Yellow Warbler 22, Chestnutsided Warbler 1, Magnolia Warbler 2, Cape May Warbler 1 (stationary 1), Black-throated Blue Warbler 24, Yellow-rumped Warbler 50, Black-throated Green Warbler 6, Blackburnian Warbler 1, Pine Warbler 27, Prairie Warbler 11, Bay-breasted Warbler 1, Blackpoll Warbler 6, Black-and-white Warbler 5, American Redstart 23, Worm-eating Warbler 3, Ovenbird 21, Northern Waterthrush 2, Louisiana Waterthrush 3, Kentucky Warbler 1, Common Yellowthroat 29, Hooded Warbler 1, Yellow-breasted Chat 15, Summer Tanager 6, Scarlet Tanager 15, Northern Cardinal 281 (stationary 1, feeder 135, regular 245), Rose-breasted Grosbeak 5 (feeder 1, regular 4), Blue Grosbeak 17, Indigo Bunting 108 (feeder 2, regular 106), Eastern Towhee 92 (feeder 5, regular 87), Chipping Sparrow 87 (feeder 3, regular 84), Field Sparrow 34, Savannah Sparrow 2, Grasshopper Sparrow 4, Song Sparrow 69 (feeder 8, regular 61), White-throated Sparrow 3, Dark-eyed Junco 2, Bobolink 16, Redwinged Blackbird 79, Eastern Meadowlark 44), Common Grackle 460 (stationary 1, feeder 16, regular 443), Brown-headed Cowbird 64 (feeder 7, regular 57), Orchard Oriole 9, Baltimore Oriole 8, House Finch 86 (feeder 26, regular 60), American Goldfinch 281 (feeder 1, regular 280), House Sparrow 53.

Total: 129 species, 6647 individuals (22 stationary, 204 feeder, 6421 regular, 0 night).

County Compiler: Dennis E. Burnette, 4209 Bramlet Place, Greensboro, NC 27407.

Participants: Carolyn Allen, Donald Allen, Louise Brown, Dennis Burnette, Lynn Burnette, Charlie Campbell, Sue Cole, Phil Crisp, Nina Dameron, Scott Depue, Dolores Foutch, Wally Foutch, Sharon Gallimore, Larry Gasper, Sally Howell, Mildred Kallenbach, Elizabeth Link, Henry Link, Jean McCoy, Dorothy Mestik, Lynn Moseley, Jean Murdick, Soni Read, Tom Shepherd, Emily Tyler, Judie Underkoffler, Calvin Weimer, Susan Weimer.

Haywood County, NC. (Mountains)

Olive-sided Flycatcher 1. There was no organized Haywood County count. Birders from Buncombe County noted this uncommon species, which was not reported on any organized count, while passing through the Mt. Pisgah campground on the Blue Ridge Parkway on count day. Observers: Eric Pyeritz, Linda Pyeritz.

Henderson County, NC. (Mountains)

0800 to 1700. Weather: temperature 65° AM, 70° noon, 72° PM; wind: not reported; clouds none; precipitation: none. Stationary: none. Feeder watching: none. Regular: 13 observers in 7 parties; regular hours foot 13:15; regular hours car 14:00; regular miles foot 6; regular miles car 158.5. Night: none.

County summary: 27:15 party hours; 164.5 party miles, 13 participants.

Double-crested Cormorant 1, Great Blue Heron 1, Great Egret 1, Green Heron 2, Canada Goose 34, Wood Duck 10, Mallard 49, Blue-winged Teal 11, Black Vulture 2, Turkey Vulture 40, Osprey 1, Sharp-shinned Hawk 1, Broadwinged Hawk 4, Red-tailed Hawk 7, American Kestrel 6, Peregrine Falcon 1, Wild Turkey 2, Northern Bobwhite 1, Killdeer 9, Greater Yellowlegs 11, Lesser Yellowlegs 1, Solitary Sandpiper 3, Spotted Sandpiper 7, Rock Dove 10, Mourning Dove 73, Yellow-billed Cuckoo 2, Barred Owl 1, Common Nighthawk 2, Chimney Swift 49, Ruby-throated Hummingbird 2, Belted Kingfisher 5, Red-bellied Woodpecker 14, Downy Woodpecker 15, Hairy Woodpecker 3, Northern Flicker 12, Pileated Woodpecker 5, Eastern Wood Pewee 7, Acadian Flycatcher 14, Willow Flycatcher 1, Eastern Phoebe 30, Great Crested, Flycatcher 7, Eastern Kingbird 3, Purple Martin 2, Tree Swallow 3, Northern Rough-winged Swallow 28, Bank Swallow 2, Cliff Swallow 4, Barn Swallow 104, Blue Jay 99, American Crow 152, Common Raven 3, Carolina Chickadee 53, Tufted Titmouse 70, White-breasted Nuthatch 2,

Carolina Wren 71, House Wren 1, Ruby-crowned Kinglet 1, Blue-gray Gnatcatcher 31, Eastern Bluebird 35, Veery 1, Swainson's Thrush 3, Wood Thrush 18, American Robin 124, Gray Catbird 20, Northern Mockingbird 26, Brown Thrasher 37, Cedar Waxwing 26, European Starling 94, White-eyed Vireo 18, Blue-headed Vireo 11, Yellow-throated Vireo 4, Red-eyed Vireo 86, Northern Parula 8, Yellow Warbler 6, Chestnut-sided Warbler 30, Black-throated Blue Warbler 8, Yellow-rumped Warbler 50, Black-throated Green Warbler 13, Yellow-throated Warbler 1, Pine Warbler 7, Palm Warbler 2, Blackpoll Warbler 36, Black-and-white Warbler 10, American Redstart 29, Worm-eating Warbler 9, Ovenbird 30, Northern Waterthrush 9, Louisiana Waterthrush 2, Kentucky Warbler 1, Common Yellowthroat 35, Hooded Warbler 42, Yellow-breasted Chat 5, Scarlet Tanager 19, Northern Cardinal 110, Rose-breasted Grosbeak 15, Blue Grosbeak 2, Indigo Bunting 115, Eastern Towhee 141, Chipping Sparrow 27, Field Sparrow 15, Savannah Sparrow 1, Grasshopper Sparrow 1, Song Sparrow 193, White-throated Sparrow 11, Darkeyed Junco 5, Bobolink 2, Red-winged Blackbird 58, Eastern Meadowlark 17, Rusty Blackbird 1, Common Grackle 64, Brown-headed Cowbird 12, Baltimore Oriole 1, House Finch 12, American Goldfinch 73, House Sparrow 10.

Total: 115 species, 2825 individuals (0 stationary, 0 feeder, 2825 regular, 0 night).

County Compiler: Simon Thompson, P.O. Box 1095, Skyland, NC 28776. Participants: Alvin Barnwell, Susan Daugherty, Laurence Farer, Wayne Forsythe, Peggy Franklin, Rick Hensley, John Locurto, Barbara Neal, Jim Neal, Ron Selvey, John Ulinski, Marilyn Westphal, Jennifer Wren.

Jones County, NC. (Coastal Plain)

0630 to 1900. Weather: temperature 58° predawn, 77° noon, 65° dusk; wind 0-5 mph predawn, 0-5 mph dawn, 10-20 mph AM, 10-20 noon, 10-20 PM, 10-20 dusk; clouds 50% dawn, 80% AM, 10% noon, 20% PM; precipitation .5 inch AM. Stationary: none. Feeder watching: none. Regular: 2 observers in 1 party; regular hours foot 6:30; regular hours car 3:00; regular miles foot 6; regular miles car 75. Night: none.

County summary: 9:30 party hours; 81 party miles, 2 participants.

Pied-billed Grebe 1, Great Blue Heron 5, Cattle Egret 12, Green Heron 2, Canada Goose 8, Wood Duck 4, Mallard 8, Black Vulture 2, Turkey Vulture 20, Sharp-shinned Hawk 1, Red-shouldered Hawk 4, Red-tailed Hawk 2, Wild Turkey 3, American Coot 3, Killdeer 6, Lesser Yellowlegs 6, Solitary Sandpiper 1, Spotted Sandpiper 3, Laughing Gull 8, Ring-billed Gull 6, Rock Dove 2, Mourning Dove 50, Yellow-billed Cuckoo 1, Barred Owl 3, Chimney Swift 15, Ruby-throated Hummingbird 6, Belted Kingfisher 2, Red-bellied Woodpecker 5, Downy Woodpecker 1, Northern Flicker 2, Pileated

Woodpecker 2, Eastern Wood Pewee 5, Acadian Flycatcher 3, Eastern Phoebe 10, Great Crested Flycatcher 15, Eastern Kingbird 2, Horned Lark 2, Purple Martin 5, Northern Rough-winged Swallow 12, Barn Swallow 30, Blue Jay 5, American Crow 10, Fish Crow 5, Carolina Chickadee 12, Tufted Titmouse 3, Carolina Wren 8, Blue-gray Gnatcatcher 30, Eastern Bluebird 10, American Robin 2, Gray Catbird 8, Northern Mockingbird 6, Brown Thrasher 1, European Starling 3, White-eyed Vireo 5, Yellow-throated Vireo 3, Red-eyed Vireo 5, Northern Parula 10, Yellow-throated Warbler 3, Pine Warbler 4, Prairie Warbler 10, Black-and-white Warbler 1, Prothonotary Warbler 10, Worm-eating Warbler 3, Swainson's Warbler 3, Ovenbird 4, Northern Waterthrush 1, Kentucky Warbler 3, Common Yellowthroat 4, Yellow-breasted Chat 8, Summer Tanager 12, Northern Cardinal 8, Rose-breasted Grosbeak 3, Blue Grosbeak 20, Indigo Bunting 2, Eastern Towhee 3, Chipping Sparrow 10, Field Sparrow 2, White-throated Sparrow 3, Red-winged Blackbird 20, Eastern Meadowlark 2, Common Grackle 20, Brown-headed Cowbird 10, Orchard Oriole 4, American Goldfinch 8, House Sparrow 2.

Total: 85 species, 587 individuals (0 stationary, 0 feeder, 587 regular, 0 night).

County Compiler: C.E. Ballenger III, 1001 Otrento Rd., Trenton, NC 28585. Participants: C.E. Ballenger, Marian Ballenger.

Mecklenburg County, NC. (Piedmont)

0530 to 2030. Weather: temperature 65° AM, 85° PM; wind none; clouds 50% AM, 50% PM; precipitation none. Stationary: none. Feeder watching: none. Regular: 17 observers in 6 parties; regular hours foot 79:45, regular hours car 10:15; regular miles foot 38; regular miles car 116. Night: none.

County summary: 90:00 party hours; 154 party miles; 17 participants.

Common Loon 1, Double-crested Cormorant 8, Great Blue Heron 6, Green Heron 5, Canada Goose 53, Wood Duck 5, Mallard 45, Gadwall 1, Ruddy Duck 2, Black Vulture 4, Turkey Vulture 9, Osprey 5, Sharp-shinned Hawk 1, Redshouldered Hawk 5, Broad-winged Hawk 1, Red-tailed Hawk 4, American Kestrel 1, Wild Turkey 1, Northern Bobwhite 4, Killdeer 19, Greater Yellowlegs 1, Lesser Yellowlegs 3, Solitary Sandpiper 11, Spotted Sandpiper 6, Least Sandpiper 40, Common Snipe 1, Ring-billed Gull 7, Rock Dove 47, Mourning Dove 90, Yellow-billed Cuckoo 3, Great Horned Owl 2, Barred Owl 2, Common Nighthawk 2, Whip-poor-will 5, Chimney Swift 114, Rubythroated Hummingbird 3, Red-headed Woodpecker 3, Red-bellied Woodpecker 21, Downy Woodpecker 5, Hairy Woodpecker 1, Northern Flicker 4, Pileated Woodpecker 1, Eastern Wood Pewee 7, Acadian Flycatcher 2, Eastern Phoebe 6, Great Crested Flycatcher 12, Eastern Kingbird 12, Purple Martin 12, Northern Rough-winged Swallow 14, Cliff Swallow 10, Barn Swallow 58, Blue

Jay 35, American Crow 26, Carolina Chickadee 50, Tufted Titmouse 48, White-breasted Nuthatch 3, Brown-headed Nuthatch 17, Carolina Wren 71, House Wren 3, Ruby-crowned Kinglet 1, Blue-gray Gnatcatcher 50, Eastern Bluebird 35, Veery 2, Swainson's Thrush 13, Wood Thrush 18, American Robin 188, Gray Catbird 16, Northern Mockingbird 28, Brown Thrasher 45, Cedar Waxwing 127, European Starling 128, White-eyed Vireo 10, Red-eyed Vireo 41, Northern Parula 21, Yellow Warbler 6, Chestnut-sided Warbler 7, Magnolia Warbler 1, Cape May Warbler 2, Black-throated Blue Warbler 2, Yellow-rumped Warbler 14, Black-throated Green Warbler 4, Yellow-throated Warbler 2, Pine Warbler 14, Prairie Warbler 9, Palm Warbler 2, Blackpoll Warbler 8, Black & White Warbler 1, American Redstart 21, Prothonotary Warbler 1, Worm-eating Warbler 3, Ovenbird 4, Northern Waterthrush 3, Louisiana Waterthrush 1, Kentucky Warbler 3, Common Yellowthroat 15, Hooded Warbler 1, Yellow-breasted Chat 6, Summer Tanager 5, Scarlet Tanager 10, Northern Cardinal 153, Rose-breasted Grosbeak 3, Blue Grosbeak 4, Indigo Bunting 41, Eastern Towhee 42, Chipping Sparrow 14, Field Sparrow 6, Savannah Sparrow 3, Grasshopper Sparrow 1, Song Sparrow 21, Whitethroated Sparrow 5, Bobolink 15, Red-winged Blackbird 25, Eastern Meadowlark 14, Common Grackle 125, Brown-headed Cowbird 26, Orchard Oriole 4, Baltimore Oriole 3, House Finch 28, American Goldfinch 65, House Sparrow 54.

Total: 120 species, 2473 individuals (0 stationary, 0 feeder, 2473 regular, 0 night).

County Compiler: Donald W. Seriff, 951 Hollywood St., Apt A, Charlotte, NC 28211.

Participants: Larry Barden, Ben Berry, Rob Bierregaard, Joann Covington, Julie Covington, Ralph Covington, Wayne Covington, Dave Frech, Kim Garrett, Tom McRae, Taylor Piephoff, Don Seriff, Marek Smith, Lisbeth Stockman, Rob VanEpps, Mary Welty, and Harriett Whitsett.

Moore County, NC. (Sandhills)

500 to 2000. Weather: temperature 52° predawn, 52° dawn, 55° AM, 59° noon, 64° PM, 61° dusk, 54° post-dusk; wind NW 10 mph predawn, NW 6 mph dawn, WNW 20 AM, NW 8 noon, NW 14 mph PM, N 3 mph dusk, NNE 8 post-dusk; clouds none predawn, 20% dawn, none AM, none noon, 10% PM, none dusk, none post-dusk; precipitation none throughout the day. Stationary: 8 observers in 7 parties; stationary hours 16:30. Feeder Watching: 17 observers watching 21 feeding stations; feeder watching hours 73:30. Regular: 13 observers in 10 parties; regular hours foot 38:00; regular hours car 34:00; regular miles foot 32; regular miles car 362. Night: 3 observers in 3 parties; night hours 5:00; night miles 6.

County summary: 167 party hours; 400 party miles, 30 participants.

Common Loon 2, Pied-billed Grebe 3, Double-crested Cormorant 4 (stationary 2, regular 2), Great Blue Heron 5, Mute Swan 5, Canada Goose 54 (stationary 14, regular 40), Wood Duck 31, Mallard 52 (stationary 11, regular 41), Blue-winged Teal 1, American Wigeon 1, Red-breasted Merganser 2, Ruddy Duck 3, Black Vulture 1, Turkey Vulture 24 (stationary 6, regular 18), Osprey 2, Bald Eagle (adult) 2, Sharp-shinned Hawk 2 (stationary 1, regular 1), Cooper's Hawk 2, Red-shouldered Hawk 6, Broad-winged Hawk 1, Red-tailed Hawk 7 (stationary 1, regular 6), American Kestrel 3, Wild Turkey 1, Northern Bobwhite 10 (stationary 1, regular 9), Sora 1, American Coot 20, Killdeer 15 (stationary 1, regular 14), Solitary Sandpiper 5, Spotted Sandpiper 21 (stationary 2, regular 19), Peep sp. 1, Ring-billed Gull 5, Rock Dove 16 (stationary 4, regular 12), Mourning Dove 163 (feeder 42, regular 121, Yellowbilled Cuckoo 11, Barred Owl 2 (night 2), Common Nighthawk 12, Chuckwill's-widow 21 (night 21), Whip-poor-will 3 (night 3), Chimney Swift 104 (stationary 9, regular 95), Ruby-throated Hummingbird 18 (feeder 8, regular 10), Belted Kingfisher 7 (stationary 1, regular 6), Red-headed Woodpecker 13 (feeder 3, regular 10), Red-bellied Woodpecker 48 (feeder 12, regular 36), Downy Woodpecker 14 (feeder 9, regular 5), Hairy Woodpecker 4 (stationary 1, regular 3), Red-cockaded Woodpecker 10 (stationary 2, regular 8), Northern Flicker 12 (stationary 5, regular 7), Pileated Woodpecker 10 (stationary 1, regular 9), Eastern Wood Pewee 39 (stationary 2, regular 37), Acadian Flycatcher 12, Eastern Phoebe 20 (stationary 1, regular 19), Great Crested Flycatcher 78 (stationary 8, regular 70), Eastern Kingbird 34 (stationary 4, regular 30), Horned Lark 2, Purple Martin 53 (stationary 4, regular 49), Northern Rough-winged Swallow 19, Bank Swallow 1, Barn Swallow 62 (stationary 5, regular 57), Blue Jay 76 (stationary 10, feeder 10, regular 56), American Crow 95 (stationary 11, regular 84 Fish Crow 45 (stationary 8, regular 37), Carolina Chickadee 44 (feeder 16, regular 28), Tufted Titmouse 72 (feeder 27, regular 45), White-breasted Nuthatch 23 (feeder 10, regular 13), Brown-headed Nuthatch 32 (feeder 8, regular 24), Carolina Wren 72 (feeder 11, regular 61), Ruby-crowned Kinglet 1, Blue-gray Gnatcatcher 38 (stationary 1, regular 37), Eastern Bluebird 153 (stationary 14, regular 95), Veery 1 (stationary 1), Swainson's Thrush 1 (stationary 1), Wood Thrush 38 (stationary 8, regular 30), American Robin 63 (stationary 24, regular 39), Gray Catbird 35 (stationary 14, regular 21), Northern Mockingbird 77 (stationary 14, regular 63), Brown Thrasher 56 (stationary 5, feeder 10, regular 41), American Pipit 70, Cedar Waxwing 41 (stationary 2, regular 39), Loggerhead Shrike 14 (stationary 2, regular 12), European Starling 67 (stationary 3, regular 64), White-eyed Vireo 14, Blue-headed Vireo 2, Yellow-throated Vireo 4, Red-eyed Vireo 38, Northern Parula 13, Yellow Warbler 2, Magnolia Warbler 1, Black-

throated Blue Warbler 8, Yellow-rumped Warbler 18, Black-throated Green Warbler 1, Yellow-throated Warbler 15, Pine Warbler 41 (feeder 6, regular 35), Prairie Warbler 25, Blackpoll Warbler 8, Black-and-white Warbler 11, American Redstart 14, Prothonotary Warbler 12, Worm-eating Warbler 1, Swainson's Warbler 1, Ovenbird 31, Louisiana Waterthrush 3, Kentucky Warbler 3, Common Yellowthroat 38 (stationary 1, regular 37), Hooded Warbler 14, Wilson's Warbler 3 (stationary 3), Yellow-breasted Chat 17, Summer Tanager 19 (stationary 2, regular 17), Scarlet Tanager 6 (stationary 2, regular 4), Northern Cardinal 119 (feeder 36, regular 83), Rose-breasted Grosbeak 2 (stationary 1, regular 1), Blue Grosbeak 24, Indigo Bunting 51 (stationary 6, regular 45), Eastern Towhee 83 (feeder 19, regular 64), Bachman's Sparrow 1, Chipping Sparrow 80 (stationary 6, regular 74), Field Sparrow 13, Grasshopper Sparrow 4, Song Sparrow 1, Red-winged Blackbird 37 (stationary 2, regular 35), Eastern Meadowlark 44, Common Grackle 154 (stationary 28, regular 126), Brown-headed Cowbird 21 (feeder 11, regular 10), Orchard Oriole 16, House Finch 41 (feeder 20, regular 21), American Goldfinch 64 (feeder 15, regular 49), House Sparrow 17 (feeder 2, regular 15). Total: 127 species, 3293 individuals (259 stationary, 275 feeder, 2733

regular, 26 night).

County Compiler: Elizabeth Watson, 104 Rob Roy Rd., Southern Pines, NC 28387.

Participants: Linda Alderman, Eleanor Anderson, Kerry Brust, Dick Burk, Marion Burk, Susan Campbell, Dick Dole, Lois Dole, Ruth Finley, Mac Goodwin, Scott Hartley, Jack Heerema, Chris Helms, Pat Hoffman, Wayne Irvin, Robert Johnson, Marion Jones, Anne Kelly, John Kelly, Sean Kelly, Edith Knight, Charlene Magiera, Billy McKenzie, Dan Pieroni, George Rainoff, Alan Schultz, Bill Stoffel, Libba Watson, David Wessinger, Ted York.

Onslow County, NC. (Coast)

Midnight to 2000. Weather: temperature 61° predawn, 61° dawn, 76° noon, 79° PM; wind 0 predawn, 0 dawn, 10-20 mph noon; clouds 50% PM; precipitation none. Stationary: none. Feeder watching: 2 observers watching 2 feeding stations; hours feeder watching 4. Regular: 12 observers in 8 parties; regular hours foot 29:00; regular hours car 18:00, regular hours boat 9:00; regular miles foot 25; regular miles car 316, regular miles boat 38. Night: 2 observers in 2 parties; night hours 2:30, night miles 4.5.

County summary: 62:30 party hours; 383.5 party miles, 13 participants.

Common Loon 4, Northern Gannet 20, Brown Pelican 32, Double-crested Cormorant 150, Great Blue Heron 15, Great Egret 25, Snowy Egret 10, Little Blue Heron 1, Tricolored Heron 3, Cattle Egret 10, Green Heron 18, Blackcrowned Night Heron 1, Snow Goose 1, Canada Goose 8, Wood Duck 46,

American Black Duck 5, Mallard 15, Blue-winged Teal 11, Northern Shoveler 1, Gadwall 2, Red-breasted Merganser 11, Ruddy Duck 14, Black Vulture 5, Turkey Vulture 76, Osprey 39, Swallowtail Kite 1, Red-shouldered Hawk 6, Red-tailed Hawk 6, Northern Bobwhite 19 (feeder 2, regular 17), Clapper Rail 17, Virginia Rail 1, Sora 3, Common Moorhen 4, American Coot 13, Sandhill Crane 2, Black-bellied Plover 90, Wilson's Plover 4, Semipalmated Plover 132, Killdeer 39, American Oystercatcher 10, Black-necked Stilt 2, Greater Yellowlegs 76, Lesser Yellowlegs 48, Solitary Sandpiper 22, Willet 33, Spotted Sandpiper 63, Whimbrel 17, Ruddy Turnstone 2, Red Knot 130, Sanderling 37, Semipalmated Sandpiper 109, Western Sandpiper 5, Least Sandpiper 147, White-rumped Sandpiper 4, Dunlin 48, Peep sp. 83, Short-billed Dowitcher 22, Laughing Gull 455, Bonaparte's Gull 1, Ring-billed Gull 93, Herring Gull 51, Royal Tern 66, Sandwich Tern 3, Forster's Tern 15, Least Tern 30, Black Tern 1, Black Skimmer 40, Rock Dove 38, Mourning Dove 139 (feeder 16, regular 123), Eurasian Collared-Dove 3, Yellow-billed Cuckoo 24, Eastern Screechowl 1 (night 1), Barred Owl 5 (night 5), Common Nighthawk 2, Chuck-will'swidow 7 (night 7), Whip-poor-will 11 (night 11), Chimney Swift 54, Rubythroated Hummingbird 7 (feeder 5, regular 2), Belted Kingfisher 2, Red-headed Woodpecker 12, Red-bellied Woodpecker 18 (feeder 8, regular 10), Downy Woodpecker 11 (feeder 4, regular 7), Hairy Woodpecker 5, Red-cockaded Woodpecker 10, Northern Flicker 10, Pileated Woodpecker 6, Eastern Wood Pewee 21, Acadian Flycatcher 26, Empidonax sp. 1, Great Crested Flycatcher 77, Eastern Kingbird 32, Horned Lark 2, Purple Martin 144 (feeder 29, regular 115), Tree Swallow 76, Northern Rough-winged Swallow 32, Bank Swallow 22, Cliff Swallow 1, Barn Swallow 287, Blue Jay 35 (feeder 8, regular 27), American Crow 49, Fish Crow 21, Carolina Chickadee 43 (feeder 6, regular 37), Tufted Titmouse 55 (feeder 5, regular 50), White-breasted Nuthatch 14 (feeder 2, regular 12), Brown-headed Nuthatch 34 (feeder 4, regular 30), Carolina Wren 52 (feeder 3, regular 49), House Wren 2, Blue-gray Gnatcatcher 58, Eastern Bluebird 85, Wood Thrush 25, American Robin 16, Gray Catbird 35, Northern Mockingbird 62, Brown Thrasher 8, European Starling 132, White-eyed Vireo 27, Yellow-throated Vireo 7, Red-eyed Vireo 43, Northern Parula 77, Yellow Warbler 5, Cape May Warbler 1, Yellow-rumped Warbler 1, Yellow-throated Warbler 32, Pine Warbler 40, Prairie Warbler 76, Blackpoll Warbler 1, Black-and-white Warbler 6, Prothonotary Warbler 58, Worm-eating Warbler 6, Swainson's Warbler 4, Ovenbird 22, Northern Waterthrush 2, Louisiana Waterthrush 4, Kentucky Warbler 2, Common Yellowthroat 58, Hooded Warbler 21, Yellow-breasted Chat 24, Summer Tanager 27, Scarlet Tanager 2, Northern Cardinal 99 (feeder 11, regular 88), Rose-breasted Grosbeak 1, Blue Grosbeak 48, Indigo Bunting 59 (feeder 2, regular 57), Painted Bunting 15, Eastern Towhee 44 (feeder 4, regular 40), Bachman's Sparrow 12, Chipping Sparrow 30 (feeder 6, regular 24), Field Sparrow 7, Savannah Sparrow 4, Grasshopper Sparrow 4, Sharp-tailed Sparrow 2, Seaside Sparrow 4, Bobolink 150, Red-winged Blackbird 370, Eastern Meadowlark 47, Boat-tailed Grackle 64, Common Grackle 70 (feeder 5, regular 65), Brownheaded Cowbird 74 (feeder 6, regular 68), Orchard Oriole 23, House Finch 9 (feeder 2, regular 7), American Goldfinch 5, House Sparrow 26.

Total: 160 species, 5998 individuals (0 stationary, 128 feeder, 5846 regular, 24 night).

County Compiler: James P. O'Donnell, Sr., 664 Fire Tower Rd., Richlands, NC 28574.

Participants: John Fussell III, Buddy Garrett, Barbara Gould, Gill Grant, John Hammond, Bob Holmes, Nell Moore, Jimi Moore, Rosalyn Mullins, Jim O'Donnell, Sr., Laura O'Donnell, Mary Wyman, Victor Zeni.

Pitt County, NC. (Coastal Plain)

0600 to 1930. Weather: temperature 62° predawn, 62° dawn, 73° AM, 73° noon, 75° PM, 72° dusk, 70° post-dusk; wind 5 mph predawn, 5 mph dawn, 10-18 mph AM, 10-18 mph noon, 10 mph PM, 5-10 mph dusk, 5 mph post-dusk; clouds 80% predawn, 80% dawn, 70% AM, 0-50% noon, 50% PM, 50% dusk, 20% post-dusk; precipitation none. Stationary: 1 observer in 1 party, stationary hours 6. No feeder watching. Regular: 2 observers in 2 parties; regular hours foot 7:00; regular hours car 4:00; regular miles foot 6; regular miles car 137. Night: 1 observer in 1 party; night hours 0:45, night miles 12.

County summary: 17:45 party hours; 155 party miles, 3 participants.

Common Loon 3, Pied-billed Grebe 1, Double-crested Cormorant 20, Great Blue Heron 13, Great Egret 2 (stationary 1, regular 1), Green Heron 1, Canada Goose 29 (stationary 2, regular 27), Wood Duck 7, Mallard 15, Ruddy Duck 1, Black Vulture 3, Turkey Vulture 30, Osprey 1, Bald Eagle 4 (adult 1, imm. 3), Sharp-shinned Hawk 1 (stationary 1), Red-shouldered Hawk 2, Red-tailed Hawk 4, American Kestrel 1, Northern Bobwhite 7, Semipalmated Plover 1, Killdeer 8, Greater Yellowlegs 1, Lesser Yellowlegs 6, Solitary Sandpiper 2, Spotted Sandpiper 9 (stationary 1, regular 8), Least Sandpiper 8, Common Snipe 2, Least Tern 6, Rock Dove 10, Mourning Dove 65 (stationary 5, regular 60), Yellow-billed Cuckoo 1, Eastern Screech-owl 2 (night 2), Great Horned Owl 2 (night 2), Chuck-will's-widow 2 (night 2), Whip-poor-will 3 (night 3), Chimney Swift 25 (stationary 5, regular 20), Ruby-throated Hummingbird 3, Belted Kingfisher 2 (stationary 1, regular 1), Red-bellied Woodpecker 12 (stationary 2, regular 10), Downy Woodpecker 3 (stationary 1, regular 2), Hairy Woodpecker 1, Northern Flicker 4, Pileated Woodpecker 3, Eastern Wood Pewee 6, Acadian Flycatcher 12, Eastern Phoebe 1, Great Crested Flycatcher 13 (stationary 1, regular 12), Eastern Kingbird 9, Horned Lark 2, Purple Martin

29 (stationary 1, regular 28), Tree Swallow 10, Northern Rough-winged Swallow 8, Bank Swallow 2, Barn Swallow 55, Blue Jay 8 (stationary 3, regular 5), American Crow 34 (stationary 2, regular 32), Fish Crow 16, Carolina Chickadee 11 (stationary 5, regular 6), Tufted Titmouse 9 (stationary 1, regular 8), White-breasted Nuthatch 3 (stationary 1, regular 2), Brownheaded Nuthatch 5 (stationary 3, regular 2), Carolina Wren 27 (stationary 2, regular 25), House Wren 1, Blue-gray Gnatcatcher 12, Eastern Bluebird 55, Wood Thrush 23, American Robin 28 (stationary 8, regular 20), Gray Catbird 6 (stationary 2, regular 4), Northern Mockingbird 32 (stationary 2, regular 30), Brown Thrasher 13 (stationary 1, regular 12), Loggerhead Shrike 3, European Starling 82 (stationary 2, regular 80), White-eyed Vireo 8, Yellow-throated Vireo 4, Red-eyed Vireo 15, Northern Parula 6, Yellow Warbler 2 (stationary 1, regular 1), Black-throated Blue Warbler 4, Yellow-throated Warbler 2, Pine Warbler 13 (stationary 1, regular 12), Prairie Warbler 3, Blackpoll Warbler 1, Black-and-white Warbler 3, Prothonotary Warbler 18, Worm-eating Warbler 3, Swainson's Warbler 1, Ovenbird 20, Louisiana Waterthrush 3, Kentucky Warbler 4, Common Yellowthroat 12, Hooded Warbler 4, Yellow-breasted Chat 4, Summer Tanager 6, Scarlet Tanager 1, Northern Cardinal 27 (stationary 5, regular 22), Rose-breasted Grosbeak 1, Blue Grosbeak 20, Indigo Bunting 35, Eastern Towhee 5, Chipping Sparrow 19 (stationary 1, regular 18), Field Sparrow 4, Grasshopper Sparrow 7, Henslow's Sparrow 8, White-throated Sparrow 1 (stationary 1), Bobolink 40, Red-winged Blackbird 51 (stationary 1, regular 50), Eastern Meadowlark 21 (stationary 1, regular 20), Common Grackle 87 (stationary 12, regular 75), Brown-headed Cowbird 9 (stationary 1, regular 8), Orchard Oriole 9 (stationary 3, regular 6), House Finch 5 (stationary 1, regular 4), American Goldfinch 20, House Sparrow 18 (stationary 3, regular 15).

Total: 112 species, 1365 individuals (84 stationary, 0 feeder, 1272 regular, 9 night).

County Compilers: Veronica Pantelidis, 106 Lakeview Dr., Greenville, NC 27858, John S. Wright, 1953-A Quail Ridge Rd., Greenville, NC 27858.

Participants: Veronica Pantelidis, John Wright, Paula Wright.

Polk County, NC. (Piedmont)

0600 to 1800. Weather: temperature 60° predawn, 62° dawn, 70° AM, 70° noon, 80° PM; wind SW 5 mph predawn, SW 10 mph dawn, SW 10 mph AM, SW 10 mph noon, SW 5 mph PM; clouds 0 predawn, 0 dawn, 0 AM, 40% noon, 30% PM; precipitation: none. Stationary: none. Feeder watching: none. Regular: 2 observers in 1 party; regular hours foot 6:00; regular hours car 6:00; regular miles foot 4; regular miles car 45. Night: none.

County summary: 12 party hours; 50 party miles, 2 participants.

Green Heron 2, Canada Goose 21, Blue-winged Teal 1, Turkey Vulture 5, Osprey 1, Cooper's Hawk 1, Red-tailed Hawk 5, Wild Turkey 1, Northern Bobwhite 2, Killdeer 11, Lesser Yellowlegs 1, Solitary Sandpiper 2, Spotted Sandpiper 2, Least Sandpiper 10, Rock Dove 11, Mourning Dove 25, Yellowbilled Cuckoo 1, Chimney Swift 39, Ruby-throated Hummingbird 12, Belted Kingfisher 2, Red-bellied Woodpecker 15, Downy Woodpecker 5, Hairy Woodpecker 2, Northern Flicker 3, Pileated Woodpecker 6, Eastern Wood Pewee 6, Acadian Flycatcher 4, Eastern Phoebe 8, Great Crested Flycatcher 6, Eastern Kingbird 35, Horned Lark 1, Purple Martin 1, Northern Rough-winged Swallow 24, Bank Swallow 3, Barn Swallow 66, Blue Jay 16, American Crow 23, Carolina Chickadee 7, Tufted Titmouse 16, White-breasted Nuthatch 5, Brown-headed Nuthatch 6, Carolina Wren 33, House Wren 2, Blue-gray Gnatcatcher 10, Eastern Bluebird 25, Wood Thrush 6, American Robin 28, Gray Catbird 12, Northern Mockingbird 15, Brown Thrasher 9, Cedar Waxwing 175, European Starling 30, White-eyed Vireo 3, Blue-headed Vireo 1, Yellow-throated Vireo 13, Red-eyed Vireo 47, Northern Parula 3, Yellow Warbler 6, Chestnut-sided Warbler 1, Magnolia Warbler 3, Cape May Warbler 28, Black-throated Blue Warbler 6, Yellow-rumped Warbler 25, Black-throated Green Warbler 1, Yellow-throated Warbler 6, Pine Warbler 7, Prairie Warbler 1, Palm Warbler 1, Blackpoll Warbler 6, Black-and-white Warbler 10, American Redstart 27, Worm-eating Warbler 2, Ovenbird 4, Louisiana Waterthrush 2, Kentucky Warbler 8, Common Yellowthroat 15, Hooded Warbler 10, Yellow-breasted Chat 4, Summer Tanager 1, Scarlet Tanager 21, Northern Cardinal 37, Rose-breasted Grosbeak 3, Blue Grosbeak 13, Indigo Bunting 104, Eastern Towhee 29, Chipping Sparrow 10, Field Sparrow 5, Savannah Sparrow 4, Grasshopper Sparrow 11, Song Sparrow 28, Whitethroated Sparrow 2, Bobolink 105, Red-winged Blackbird 11, Eastern Meadowlark 27, Common Grackle 24, Brown-headed Cowbird 15, Orchard Oriole 9, Baltimore Oriole 9, House Finch 9, American Goldfinch 114, House Sparrow 3.

Total: 101 species, 1592 individuals (0 stationary, 0 feeder, 1592 regular, 0 night).

County Compiler: Simon R. B. Thompson, P.O. Box 1095, Skyland, NC 28776.

Participants: Dee Boucher, Simon Thompson.

Randolph County, NC. (Piedmont)

0500 to 1900. Weather 61° predawn, 74° AM, 80° noon, 82° PM, 74° dusk, 70° post-dusk; wind 3 mph predawn, 6 mph AM, 4 mph noon, 5 mph PM, 0 dusk, 0 post-dusk; clouds 100% predawn, 30% AM, 80% noon, 50% PM, 50% dusk, 50% post-dusk; precipitation none. Stationary: 2 observers in 1 party;

stationary hours 7:00. Feeder watching: none. Regular: 6 observers in 2 parties; regular hours foot 9:30, regular hours car 5:40; regular miles foot 6.5, regular miles car 82.7. Night: 1 observer in 1 party; night hours 2:00.

County summary: 24:10 party hours; 89.2 party miles; 8 participants.

Canada Goose 58 (stationary 5, regular 53), Wood Duck 1, Mallard 11, Black Vulture 2, Turkey Vulture 13 (stationary 1, regular 12), Broad-winged Hawk 2, Red-tailed Hawk 5, Northern Bobwhite 1, Killdeer 7, Spotted Sandpiper 1, Rock Dove 1, Mourning Dove 42 (stationary 4, regular 38), Barred Owl 1 (night 1), Common Nighthawk 2, Chuck-will's-widow 1 (night 1), Chimney Swift 34, Ruby-throated Hummingbird 2 (stationary 2), Belted Kingfisher 1, Red-bellied Woodpecker 6 (stationary 1, regular 5), Downy Woodpecker 3 (stationary 2, regular 1), Hairy Woodpecker 1, Northern Flicker 3, Pileated Woodpecker 1, Eastern Wood Pewee 2, Eastern Phoebe 3, Great Crested Flycatcher 2, Purple Martin 12, Tree Swallow 3, Barn Swallow 20, Blue Jay 24 (stationary 2, regular 22), American Crow 27 (stationary 2, regular 25), Carolina Chickadee 19 (stationary 4, regular 13, night 2), Tufted Titmouse 3 (stationary 3), White-breasted Nuthatch 1, Brown-headed Nuthatch 2, Carolina Wren 16 (stationary 2, regular 11, night 3), Blue-gray Gnatcatcher 6, Eastern Bluebird 45, Swainson's Thrush 2, Wood Thrush 17 (stationary 1, regular 12, night 4), American Robin 102 (stationary 2, regular 200), Gray Catbird 4, Northern Mockingbird 44 (stationary 1, regular 43), Brown Thrasher 11 (stationary 1, regular 10), European Starling 118 (stationary 3, regular 115), White-eyed Vireo 2, Red-eyed Vireo 30, Northern Parula 2, Yellow Warbler 1, Black-throated Blue Warbler 1, Yellow-rumped Warbler 3, Pine Warbler 8, Prairie Warbler 4, American Redstart 1, Ovenbird 7, Common Yellowthroat 7, Yellow-breasted Chat 2, Summer Tanager 7, Northern Cardinal 36 (stationary 2, regular 30, night 4), Blue Grosbeak 13, Indigo Bunting 29, Eastern Towhee 15 (stationary 1, regular 14), Chipping Sparrow 28, Field Sparrow 9, Grasshopper Sparrow 13, Song Sparrow 7 (stationary 3, regular 4), Swamp Sparrow 1, White-throated Sparrow 1 (stationary 1), Red-winged Blackbird 13, Eastern Meadowlark 33, Common Grackle 44 (stationary 41, regular 3), Brown-headed Cowbird 1, Orchard Oriole 2, Baltimore Oriole 1, House Finch 14 (stationary 4, regular 10), American Goldfinch 50 (stationary 4, regular 46), House Sparrow 14 (stationary 1, regular 13).

Total: 77 species, 1081 individuals (52 stationary, 0 feeder, 1011 regular, 18 night).

County Compiler: Dennis Burnette, 4209 Bramlet Pl., Greensboro, NC 27407.

Participants: Dennis Burnette, Lynn Burnette, Dolores Foutch, Wally Foutch, Clarence Mattocks, Jim Mattocks, Evelyn Schoonover, John Schoonover.

Transylvania County, NC. (Mountains)

Beginning and ending times not reported. Weather: temperature 60°_i-72°; wind 0-1; clouds sunny, clear; precipitation none. Stationary: 1 observer in 1 party; stationary hours 2:00. Feeder Watching: 7 observers watching 7 feeding stations; feeder watching hours 21:00. Regular: 33 observers in 16 parties; regular hours foot 38:00; regular hours car 60:00; regular miles foot 33; regular miles car 432. Night: 3 observers in 3 parties; night hours 3; night miles 0.

County summary: 124 party hours; 465 party miles; 39 participants.

Great Blue Heron 2, Green Heron 1, Canada Goose 91, Wood Duck 1, Mallard 41, Blue-winged Teal 1, Black Vulture 2, Turkey Vulture 86, Sharpshinned Hawk 2, Cooper's Hawk 3, Red-shouldered Hawk 2, Broad-winged Hawk 9 (stationary 1, regular 8), Red-tailed Hawk 3, Golden Eagle 1, American Kestrel 1, Wild Turkey 1, Northern Bobwhite 4, American Coot 1, Killdeer 7, Greater Yellowlegs 1, Solitary Sandpiper 4, Spotted Sandpiper 9, Rock Dove 5, Mourning Dove 148 (feeder 19, regular 129), Yellow-billed Cuckoo 1, 5, Mourning Dove 148 (feeder 19, regular 129), Yellow-billed Cuckoo 1, Eastern Screech-owl 1 (night 1), Great Horned Owl 1 (night 1), Barred Owl 1 (night 1), Whip-poor-will 1 (night 1), Chimney Swift 60, Ruby-throated Hummingbird 29 (feeder 8, regular 21), Belted Kingfisher 5, Red-bellied Woodpecker 13, Downy Woodpecker 18 (feeder 6, regular 12), Hairy Woodpecker 5, Northern Flicker 13 (feeder 1, regular 12), Pileated Woodpecker 23 (feeder 2, regular 21), Eastern Wood Pewee 7, Acadian Flycatcher 12, Eastern Phoebe 71, Great Crested Flycatcher 20, Eastern Windhald 28 (Actionamy 2, regular 26), Pumple Mortin 13, Tree Swallow 55. Kingbird 38 (stationary 2, regular 36), Purple Martin 13, Tree Swallow 55, Northern Rough-winged Swallow 37, Barn Swallow 183, Blue Jay 171 (feeder 10, regular 161), American Crow 318 (feeder 13, regular 305), Common Raven 5, Carolina Chickadee 87 (feeder 11, regular 76), Tufted Titmouse 142 (feeder 12, regular 130), Red-breasted Nuthatch 1, White-breasted Nuthatch 21 (feeder 6, regular 15), Carolina Wren 90 (feeder 3, regular 87), House Wren 25 (feeder 3, regular 22), Winter Wren 3, Golden-crowned Kinglet 10, Blue-gray Gnatcatcher 19, Eastern Bluebird 99 (feeder 10, regular 89), Veery 2, Wood Thrush 25, American Robin 299 (feeder 5, regular 294), Gray Catbird 40 (feeder 1, regular 39), Northern Mockingbird 25, Brown Thrasher 40 (feeder 1, regular 39), European Starling 159 (feeder 7, regular 152), White-eyed Vireo 20, Blue-headed Vireo 55 (stationary 1, regular 54), Yellow-throated Vireo 1, Red-eyed Vireo 100, Blue-winged Warbler 1, Northern Parula 71, Yellow Warbler 10, Chestnut-sided Warbler 42, Magnolia Warbler 4, Cape May Warbler 2, Black-throated Blue Warbler 24, Yellow-rumped Warbler 14, Black-throated Green Warbler 9, Blackburnian Warbler 1, Yellow-throated Warbler 7 (stationary 1, regular 6), Pine Warbler 3, Prairie Warbler 1, Palm Warbler 10, Blackpoll Warbler 14, Black-and-white Warbler 35 (stationary 1, regular 34), American Redstart 11, Worm-eating Warbler 4, Swainson's

Warbler 1, Ovenbird 62, Louisiana Waterthrush 4, Kentucky Warbler 2, Common Yellowthroat 34, Hooded Warbler 112 (stationary 2, regular 110), Wilson's Warbler 1, Canada Warbler 3, Yellow-breasted Chat 4, Scarlet Tanager 29 (stationary 1, regular 28), Northern Cardinal 243 (feeder 11, regular 232), Rose-breasted Grosbeak 35 (feeder 14, regular 21), Blue Grosbeak 1, Indigo Bunting 112 (feeder 8, regular 104), Eastern Towhee 206 (feeder 9, regular 197), Chipping Sparrow 58 (feeder 7, regular 51), Field Sparrow 8, Vesper Sparrow 1, Savannah Sparrow 2, Song Sparrow 325 (feeder 4, regular 321), Swamp Sparrow 2, White-throated Sparrow 5 (feeder 1, regular 4), Darkeyed Junco 21 (feeder 2, regular 19), Bobolink 50, Red-winged Blackbird 94, Eastern Meadowlark 15, Common Grackle 104, Brown-headed Cowbird 12, Baltimore Oriole 1, House Finch 38, Pine Siskin 6, American Goldfinch 166 (feeder 20, regular 146), House Sparrow 9.

Total: 121 species; 4819 individuals (9 stationary, 194 feeder, 4612 regular, 4 night).

County Compiler: Norma Siebenheller, 187 Glen Cannon Dr., Pisgah Forest, NC 28768.

Participants: Elaine Badger, Dorothy Bauer, John Bauer, Dick Blee, Betty Dunn, Roger Dunn, Zee Eacker, Chan Frederickson, Elizabeth Galloway, Jeanne Grimmenga, Leo Grimmenga, Bill Hough, Jean Hough, Nancy Iha, Carolyn Jackson, Tom Joyce, Ludwig Kempe, Ruth Klock, Eleanor Kuss, Mary Ellen Lindley, Betty McIlwain, Janet Merrell, Carolyn Mills, Rick Mills, Erika Parmi, Cliff Petitt, Eva Robinson, Robbie Robinson, Florence Rogers, Mary Sauerteig, Bill Siebenheller, Norma Siebenheller, Marian Sutton, Bill Thomas, Shirl Thomas, Dick Thorsell, Connie Updike, George Updike, Nathan Whitmire.

Wake County, NC. (Piedmont)

0545 to 1600. Weather: temperature 55-75°; wind 5-10 mph; clouds partly cloudy; precipitation none. Stationary: not reported. Feeder watching: not reported. Regular: 65 observers in 17 parties; regular hours foot 86:00, regular hours car 11:00; regular miles foot 62, regular miles car 172. Night: observers and parties not reported; night hours 4.

County summary: 97:00 party hours; 234 party miles; 65 participants.

Common Loon 1, Double-crested Cormorant 25, Great Blue Heron 62, Great Egret 1, Green Heron 7, Mute Swan 1, Canada Goose 247, Wood Duck 30, Mallard 285, Black Vulture 25, Turkey Vulture 98, Osprey 1, Bald Eagle 2, Sharp-shinned Hawk 4, Cooper's Hawk 2, Accipitor sp. 2, Red-shouldered Hawk 22, Red-tailed Hawk 27, American Kestrel 3, Northern Bobwhite 9, American Coot 25, Semipalmated Plover 1, Killdeer 30, Lesser Yellowlegs 2, Solitary Sandpiper 23, Spotted Sandpiper 31, Semipalmated Sandpiper 3, Least

Sandpiper 7, Ring-billed Gull 191, Rock Dove 57, Mourning Dove 305, Yellow-billed Cuckoo 18, Great Horned Owl 1, Barred Owl 8, Common Nighthawk 2, Chuck-will's-widow 2, Chimney Swift 208, Ruby-throated Hummingbird 13, Belted Kingfisher 17, Red-headed Woodpecker 5, Redbellied Woodpecker 103, Downy Woodpecker 50, Hairy Woodpecker 9, Northern Flicker 34, Pileated Woodpecker 4, Eastern Wood Pewee 21, Acadian Flycatcher 42, Eastern Phoebe 21, Great Crested Flycatcher 69, Eastern Kingbird 43, Purple Martin 25, Tree Swallow 4, Northern Rough-winged Swallow 33, Cliff Swallow 70, Barn Swallow 126, Blue Jay 130, American Crow 206, Fish Crow 41, Carolina Chickadee 166, Tufted Titmouse 182, White-breasted Nuthatch 14, Brown-headed Nuthatch 22, Carolina Wren 213, House Wren 10, Sedge Wren 2, Blue-gray Gnatcatcher 163, Eastern Bluebird 67, Veery 1, Swainson's Thrush 2, Wood Thrush 41, American Robin 232, Gray Catbird 33, Northern Mockingbird 76, Brown Thrasher 55, Cedar Waxwing 253, Loggerhead Shrike 1, European Starling 307, White-eyed Vireo 20, Blue-headed Vireo 7, Yellow-throated Vireo 3, Red-eyed Vireo 151, Bluewinged Warbler 2, Golden-winged Warbler 1, Northern Parula 85, Yellow Warbler 30, Chestnut-sided Warbler 7, Black-throated Blue Warbler 50, Yellow-rumped Warbler 26, Black-throated Green Warbler 12, Yellow-throated Warbler 6, Pine Warbler 75, Prairie Warbler 17, Palm Warbler 1, Blackpoll Warbler 19, Cerulean Warbler 1, Black-and-white Warbler 14, American Redstart 43, Prothonotary Warbler 14, Worm-eating Warbler 1, Ovenbird 39, Northern Waterthrush 2, Louisiana Waterthrush 9, Kentucky Warbler 2, Common Yellowthroat 65, Hooded Warbler 5, Wilson's Warbler 1, Yellowbreasted Chat 27, Summer Tanager 32, Scarlet Tanager 20, Northern Cardinal 294, Rose-breasted Grosbeak 7, Blue Grosbeak 33, Indigo Bunting 90, Dickcissel 1, Eastern Towhee 109, Chipping Sparrow 52, Field Sparrow 14, Grasshopper Sparrow 4, Song Sparrow 6, Swamp Sparrow 5, White-throated Sparrow 11, Bobolink 2, Red-winged Blackbird 120, Eastern Meadowlark 29, Rusty Blackbird 7, Common Grackle 390, Brown-headed Cowbird 106, Orchard Oriole 26, Baltimore Oriole 6, House Finch 114, American Goldfinch 200, House Sparrow 60.

Total: 132 species, 7147 individuals (0 stationary, 0 feeder, 7147 regular, 0 night).

County Compiler: John Conners, NC State Museum of Natural History, P.O. Box 29555, Raleigh, NC 27626.

Participants: Lynn Barber, Barbara Beaman, Karen Beardon, Joe Beardon, Faye Bennett, Douglas Brame, Amanda Brown, Hal Carmichael, John Conners, Will Cook, Claudia Egelhoff, John Finnegan, Lena Gallitano, Susan Gilbert, Barbara Gottlieb, Pat Gruska, Bob Hader, Henry Hammond, Diane Hardy, Christina Harvey, Jack Harvey, Sabrina Hearst, Russell Herman, Michelle

Hernandez, Stephanie Horton, Vernon Janke, Mark Johns, Nicole Kennedy, Will Kimler, Ken Knapp, Gail Lankford, Herman Lankford, Geri Luginbuhl, Julia MacIntosh, Jim Mulholland, Medhat Mohammed, Bob O'Brien, Amaechi Okigbo, Brian Pendergraft, Kim Peters, Alice Pettyjohn, Sam Pettyjohn, Mike Pollard, Tom Quay, Peter Rogers, Will Rowland, Karen Russell, Melody Scott, Jennifer Shoemaker, Dave Smiley, Lynn Smiley, Roger Shaw, Julie Angerman-Stewart, Elsie Thomas, Terry Thomas, Susan Timmons, Victor Vasquez, Rick Van Hoy, Shane Wellendorf, Bob Wells, Jean White, Steve Williams, Lynn Woerner, Bob Zurzecki.

Wilkes County, NC. (Mountains)

0630 to 2100. Weather not reported. Stationary: none. Feeder watching: none. Regular: 3 observers in 3 parties; regular hours foot 14:00; regular hours car 5:00; regular miles foot 12; regular miles car 60. Night: none.

County summary: 19 party hours; 72 party miles, 3 participants.

Canada Goose 11, Mallard 1, Black Vulture 10, Turkey Vulture 44, Redshouldered Hawk 1, Broad-winged Hawk 1, Red-tailed Hawk 1, Ruffed Grouse 2, Wild Turkey 16, Northern Bobwhite 2, Mourning Dove 31, Chimney Swift 13, Ruby-throated Hummingbird 2, Belted Kingfisher 2, Red-bellied Woodpecker 7, Downy Woodpecker 3, Northern Flicker 2, Pileated Woodpecker 7, Eastern Wood Pewee 12, Acadian Flycatcher 1, Eastern Phoebe 16, Great Crested Flycatcher 5, Eastern Kingbird 7, Northern Rough-winged Swallow 2, Bank Swallow 6, Barn Swallow 39, Blue Jay 26, American Crow 100, Carolina Chickadee 21, Tufted Titmouse 18, Brown-headed Nuthatch 2, Carolina Wren 23, House Wren 6, Blue-gray Gnatcatcher 14, Eastern Bluebird 29, Wood Thrush 10, American Robin 13, Gray Catbird 2, Northern Mockingbird 17, Brown Thrasher 10, Cedar Waxwing 33, European Starling 38, White-eyed Vireo 2, Blue-headed Vireo 3, Red-eyed Vireo 31, Northern Parula 6, Yellow Warbler 1, Chestnut-sided Warbler 1, Cape May Warbler 4, Yellow-rumped Warbler 12, Black-throated Green Warbler 2, Pine Warbler 13, Blackpoll Warbler 1, American Redstart 1, Ovenbird 3, Louisiana Waterthrush 1. Common Yellowthroat 8. Hooded Warbler 4, Yellow-breasted Chat 4, Scarlet Tanager 10, Northern Cardinal 37, Rose-breasted Grosbeak 1, Blue Grosbeak 9, Indigo Bunting 60, Eastern Towhee 8, Chipping Sparrow 27, Field Sparrow 10, Song Sparrow 24, White-throated Sparrow 2, Dark-eyed Junco 1, Red-winged Blackbird 20, Eastern Meadowlark 12, Common Grackle 22, Brown-headed Cowbird 5, Baltimore Oriole 7, House Finch 3, American Goldfinch 25, Evening Grosbeak 1, House Sparrow 6.

Total: 79 species, 993 individuals (0 stationary, 0 feeder, 993 regular, 0 night).

 $County\ Compiler:\ Jim\ Billings,\ Gregg\ Church,\ Curtis\ Smalling.$

General Field Notes

Will Cook

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Limpkin Documented in Craven County, North Carolina

Dick Shelley 1220 Petite Terre Ct. New Bern, NC 28560 Bob Holmes 4003 Trent Pines Drive New Bern, NC 28562

On 21 June 1998 Shelley identified a Limpkin (Aramus guarauna) on the edge of a freshwater pond in the Fairfield Harbor community of Craven County, N.C. He reported his sighting, and the bird was subsequently seen by scores of observers over the following ten days. Multiple photographs were made.

This adult-plumaged individual allowed itself to be closely approached, so that details of its appearance could be appreciated by the naked eye. The long legs were gray; its long, down-curved bill was dull yellow for the proximal two-thirds of its length and gray at the tip. The bird was generally dark brown with white streaking on the neck and elongated white spots on its back and wing coverts. It appeared gangly in flight, with its neck extended and its legs hanging down. When we were observing the bird, it was feeding entirely on a mussel, the common rangia (Rangia cuneata) (Harry LeGrand, personal communication).

It is uncommon for Limpkins to stray outside their usual range in Florida. To our knowledge, this is the third report of this species in North Carolina and the first to be photographed. The first report was from Lake Waccamaw, on 7 September 1975 (Wiley and Wiley 1976), and the second on 20 May 1983 at Smith Mill Pond, near the Sampson-Bladen county line (Lee 1987).

As this is the first record of Limpkin in the state documented by photographs or specimen, acceptance by the North Carolina Bird Records Committee would place the species on the Official List.



Limpkin photographed in the Fairfield Harbor community of Craven County, NC, by Cindy Scop

Literature Cited

Wiley, RH and MS Wiley. 1976. Limpkin Observed at Lake Waccamaw, N.C. Chat 40:94-95.

Lee, DS. 1987. Breeding Birds of Carolina Bays: Succession-related Density and Diversification on Ecological Islands. Chat 51:85-102.

CBC Rare Bird Alert (704) 332-BIRD

First Record of a Snowy Plover in North Carolina

Stephen J. Dinsmore 612 1/2 West Magnolia St. Fort Collins, CO 80521

On 2 May 1994, I arrived on Portsmouth Island in Carteret County to conduct shorebird surveys. On the afternoon of 3 May, Sue Philhower, a graduate student studying Piping and Wilson's Plovers on the island, told me that she had seen a Snowy Plover (*Charadrius alexandrinus*) at the south end of the island near New Drum Inlet on 30 April and 2 May. I immediately drove to the area and finally located the bird at 1625 EDT. Since I was departing the island by ferry at 1645 EDT, I was only able to study the bird for about five minutes.

The bird was foraging on a tidal flat with other shorebirds including Piping, Wilson's, and Semipalmated Plovers. The bird was very pale, at least as pale as a Piping Plover. This feature alone separated the birds from Wilson's and Semipalmated Plovers, as did the lack of a complete breast band. The size was similar to that of a Piping, although the bird was noticeably slimmer. The legs were black, unlike the orange-colored legs of a Piping Plover. The bird also appeared longer-legged than a Piping Plover, perhaps because of the slimmer body. The underparts were white and unmarked. The mantle, upperwings, and crown were very pale brown. The bill was black and thinner than the bill of a Piping Plover. The bird had a black patch on the forecrown, black auricular patches, and a black "slash mark" on each shoulder. The latter marks represented a partial breast band, although it was much less extensive than that of a Piping Plover. The bird did not vocalize. I did not see the bird in flight, so I did not observe any features of the wing or uppertail.

This represents the first accepted record of a Snowy Plover for North Carolina (North Carolina Bird Records Committee, 1996).

Literature Cited

North Carolina Bird Records Committee. 1996. Report of the North Carolina Bird Records Committee 1995. Chat 60:136-141.

A Midwinter Specimen of the Bridled Tern in South Carolina

William Post Charleston Museum 360 Meeting St. Charleston, SC 29403 Lex Glover P.O. Box 117 Lugoff, SC 29078 Chris Newkirk 6612 Bishop Avenue Columbia, SC 29203

The Bridled Tern (Sterna anaethetus) nests throughout the Atlantic-Caribbean region, from the Bahamas to Belize and coastal Venezuela (American Ornithologists' Union 1998). It is fairly common off the coast of the Carolinas during May-October (Clapp et al. 1983). In addition, the species has been recorded about sixteen times onshore in both states, including eight specimens from South Carolina and two from North Carolina. Most onshore records are associated with hurricanes. The latest autumn record for South Carolina occurred on 16 October 1988, when D.M. Forsythe saw an individual off Charleston (McNair and Post 1993). The latest record for North Carolina is represented by an offshore specimen collected 9 November 1986 (NCSM 14998). A late winter report also exists for North Carolina: A bird was sighted on 28 February 1997 off Cape Hatteras by Brian Patteson. Even in Florida, however, the Bridled Tern is rare in winter, and Stevenson and Anderson (1994) list only nine acceptable winter reports (including five specimens).

On 18 January 1999, Glover and Newkirk found a freshly-killed Bridled Tern on Pawleys Island, Georgetown County, S.C. The bird was found in the driveway of a suburban residence, about 300 m from the ocean. The tern had apparently struck the side of the house during heavy fog that covered the island that day. Glover was able to see the bird's impact point on the light-colored wall of the residence.

The specimen is a juvenile male. It was prepared as a standard study skin, with detached, extended wing (including left humerus), and partial skeleton preserved (Charleston Museum No. 99.22.01). The left testis had a diameter of 1.3 mm; right, 1.4 mm. Mass was 99.7 g. Total length was 33.2 cm; tail length, 13 cm. The wing span was 78 cm, flattened wing length was 25.5 cm, and wing area (Pennycuick 1989) was 538 cm. The stomach was empty. The bird had oil residues on the lower abdomen. The supraorbital salt glands were well vascularized; the left gland was 16.6 x 7.9 mm.

We thank John Gerwin for his data on the November North Carolina specimen and Brian Patteson for the information on his February North Carolina sighting.

Literature Cited

American Ornithologists' Union. 1998. Check-list of North American birds, 7th ed. American Ornithologists' Union, Washington, DC.

Clapp. RB, D Morgan-Jacobs, and RC Banks. 1983. Marine birds of the southeastern United States and Gulf of Mexico. Part III: *Charadriiformes*.
 U.S. Fish and Wildlife Service, Division of Biological Services, Washington, DC. FWS/OBS-83/30.

McNair, DB, and W Post. 1993. Supplement to status and distribution of South Carolina birds. Charleston Mus. Ornithol. Contrib. 8.

Pennycuick, CJ. 1989. Bird flight performance. Oxford Univ. Press, Oxford. Stevenson, HM, and BH Anderson. 1994. The Birdlife of Florida. University Press of Florida, Gainesville.



Great Horned Owl. ©1983 D.D. Tyler

BRIEFS FOR THE FILES

Ricky Davis 608 Smallwood Drive Rocky Mount, NC 27804 RJDNC@aol.com

(All Dates Fall 1998)

I rely in part on sightings reported in Carolinabirds. Please don't, however, rely on me to pick up your sightings from Carolinabirds. Instead, please also send your sightings directly to me.

RED-THROATED LOON: One was at L. Wateree, SC, Nov. 14 for the only inland report (Lex Glover).

PACIFIC LOON: Once again, the only Pacifics found this fall were at Figure Eight Is., NC, with one to two Nov. 27, as noted by Derb Carter and Merrill Lynch.

PIED-BILLED GREBE: Four were a surprise far offshore out of Oregon Inlet, NC, Sept. 5 (Brian Patteson *et al.*). Where were these birds headed?

HORNED GREBE: Two very early Horneds were one at Huntington Beach St. Pk., SC, Aug. 29 (Lex Glover, Simon Thompson *et al.*) and one on L. Norman, NC, Sept. 4 (David & Marcia Wright).

RED-NECKED GREBE: One was found on L. Wateree, SC, Nov. 14 (Lex Glover), providing a good inland report.

EARED GREBE: This species was found at the usual locations this fall. The Goldsboro, NC, Wastewater Treatment Plant (W.T.P.) hosted a peak of 15 on Oct. 18 (Eric Dean); four was the peak at the Jacksonville, NC, W.T.P. throughout the period (Jim O'Donnell, sev. obs.); the Savannah Spoil Site, Jasper County, SC, had a peak of eight Nov. 1 (Tim Kalbach); and two were present from late Oct. through Nov. at the salt pond at C. Hatteras, NC, (m. obs.).

HERALD PETREL: Only one was found on pelagic trips this fall, off of Hatteras, NC, Aug. 8 (Brian Patteson *et al.*).

BLACK-CAPPED PETREL: Hurricane Bonnie brought in few tubenoses, but two Black-cappeds were seen on Croatan Sound, NC, Aug. 27 (Patteson *et al.*). **CORY'S SHEARWATER:** Hurricane Bonnie birds included two in the New Bern, NC, area Aug. 27 (Bob Holmes and Wade Fuller); one at the Alligator R., NC, bridge Aug. 30 (Brad Carlson); and up to 18 live and 11 dead individuals on the beach from C. Hatteras to Frisco, NC, Aug. 30 (Brad Carlson).

GREATER SHEARWATER: A good count of 183 was had off of Hatteras, NC, Aug. 8 (Patteson *et al.*).

MANX SHEARWATER: Very rare in August, one was a good find off Oregon Inlet, NC, on the 15th, as noted by Patteson *et al.*

AUDUBON'S SHEARWATER: A very good count of 704 Audubon's was had off of Hatteras, NC, Aug. 9 (Patteson *et al.*).

LEACH'S STORM-PETREL: The peak count this fall was 11 on Aug. 8 out of Hatteras, NC, (Patteson *et al.*).

BAND-RUMPED STORM-PETREL: Two were on Croatan Sound, NC, during Hurricane Bonnie, as noted by Patteson et al. Excellent offshore counts included 156 off Hatteras, NC, Aug. 8 (Patteson *et al.*) and 121 off Oregon Inlet, NC, Aug. 10 (Harry LeGrand and Paul Guris *et al.*).

WHITE-TAILED TROPICBIRD: This species was reported only twice with single immatures found off Morehead City, NC, Aug. 7 (Phil Crutchfield) and Hatteras, NC, Aug. 8 (Patteson *et al.*).

MASKED BOOBY: An late adult Masked was seen following a shrimp boat off of Litchfield Beach, SC, Nov. 21 (Bob & Barbara Maxwell). The bird was observed in flight and sitting on the water and was compared to nearby Gannets!

AMERICAN WHITE PELICAN: Reports included singles at Huntington Beach St. Pk., SC, Oct 25 (Phil Turner and Charlie Haecock), at Lake Mattamuskeet, NC, Nov. 7-25 (fide Kelly Davis; Keith Camburn), at Davis, Carteret County, NC, Nov. 14-20 (fide John Fussell), at Sunset Beach, NC, Nov. 16 (Mary McDavit), and one far inland at L. Norman, NC, Nov. 16 (fide Keith Watson).

BROWN PELICAN: An immature was present at Falls L., NC, Aug. 23 - Nov. 29 (Ricky Davis, Will Cook *et al.*, Randy Emmitt, Jim Bloor, and several others), for a rare inland occurrence. It is not known if this is the same individual that was present at Falls L. last year.

ANHINGA: Inland Anhingas included five near Scotland Neck, NC, Aug. 30 (Ricky Davis), one over Davidson Creek, L. Norman, NC, Sept. 4 (David & Marcia Wright), one at the Goldsboro, NC, W.T.P. Sept. 27 (Gene Howe), two at Mountain View Overlook, W. Kerr Scott Res., NC, Oct. 3 (Dwayne & Lori Martin *et al.*), and one at L. Mattamuskeet, NC, Nov. 27 (Kelly Davis *et al.*). MAGNIFICENT FRIGATEBIRD: An unusual number of fall sightings were had this year. Single frigatebirds were seen at Murrells Inlet, SC, Oct. 6 (Lynn Smith, *fide* Jack Peachey), at Ft. Fisher, NC, Oct. 18 (Steve Emslie), and near C. Hatteras, NC, Nov. 21 (Audrey Whitlock and B. Halstead).

REDDISH EGRET: The number of reports of this species continues to rise each year. This fall two were at Hilton Head I., SC, Aug. 22 (Lex Glover *et al.*); up to three were at the Savannah Spoil Site, SC, during August through October (m. obs.), and a rarely seen white phase immature was there Aug. 22 (Lex Glover *et al.*); up to two were present at Huntington Beach St. Pk., SC, through

the end of the period (Jack Peachey, David & Susan Disher, Dennis Forsythe, and many others); one was at Ft. Fisher, NC, through the fall (Mark Galizio, several others); up to two were at Sunset Beach, NC, August to September (Mary McDavit, several others); one was on Shackleford Banks near C. Lookout, NC, Aug. 22 (Jimi Moore); and one was at the N. Topsail Beach, NC, spoil area Aug. 19 (Jimi & Nell Moore, Jim & Laura O'Donnell).

BLACK-CROWNED NIGHT-HERON: Good inland sightings involved three at Jordan L., NC, Sept. 7 (Will Cook) and two at the Goldsboro, NC, W.T.P. Oct. 18 (Eric Dean).

YELLOW-CROWNED NIGHT-HERON: An immature at L. Santeetlah, Graham County, NC, during August (Charlotte Goedsche) was a good find.

WHITE IBIS: This species was reported all across the Carolinas this year. The farthest inland was one at Hendersonville, NC, Aug. 9 to September (Wayne Forsythe). One of the better counts was the 15 east of Aiken, SC, Aug. 2, as noted by Christine Hugella.

GLOSSY IBIS: Inland Glossies are rare, thus of note were singles in Edgecombe County, NC, Aug. 9 (Ricky Davis), at Greenville, NC, Aug. 28 (Brad Carlson), at Falls L., NC, Sept. 5 (Les Todd *et al.*), and Jordan L., NC, Sept. 5 (Will Cook *et al.*).

WOOD STORK: One at C. Hatteras, NC, Sept. 8 (*fide* Taylor Piephoff) was an excellent find. Three near Townville, SC, Sept. 20 were considerably inland (Steve Wagner *et al.*) and provided a first local record. Also eight at Fairfax, Allendale County, SC, were late on Nov. 26 (Lex Glover).

GREATER WHITE-FRONTED GOOSE: This species made a good showing in the Carolinas this fall. Five were near North, Orangeburg County, SC, Nov. 29 (Mike Turner), four were at L. Mattamuskeet, NC, Nov. 15 (Keith Watson), two were at the C. Hatteras, NC, salt pond from Nov. 17 until the end of the period (Pat Moore *et al.*), two were near Elko, Barnwell County, SC, Nov. 22-26 (Mike Turner and Lex Glover), and one was at Sneads Ferry, NC, Nov. 23 (Nell & Jimi Moore).

SNOW GOOSE: Snow Geese showed up at many unusual locations this fall. The most interesting sighting involved a flock of 35 over Mt. Pisgah, NC, Nov. 11, as noted by Bill Sanderson.

ROSS'S GOOSE: The only report of this species was of from one to two at L. Mattamuskeet, NC, Nov. 15-22 (Haven Wiley and Jeremy Hyman *et al.*).

CINNAMON TEAL: The only one reported was an eclipse male at the Savannah Spoil Site, SC, Sept. 27 until at least Nov. 15 (*fide* Taylor Piephoff). **LESSER SCAUP:** An eclipse male was quite early at Pinehurst, NC, Aug. 19, as noted by Dick Burk.

SURF SCOTER: Inland reports included one at Lookout Shoals L., NC, Nov. 5 (Dwayne & Lori Martin), three at L. Wateree, SC, Nov. 14 (Lex Glover), four

at L. Crabtree, Wake County, NC, Nov. 20 (Doug Shadwick), and three on L. Atagahi, Transylvania County, NC, Oct. 22 (Dick Blee, *fide* Norma Siebenheller).

WHITE-WINGED SCOTER: Two were unusual at the Jacksonville, NC, W.T.P. Oct. 26 (Nell Moore and Ann Foster).

OLDSQUAW: Always noteworthy inland, one was at L. Wateree, SC, Nov. 14 (Lex Glover) and two were at L. Crabtree, NC, Nov. 16 (Doug Shadwick). **RED-BREASTED MERGANSER:** Good inland counts included 25 at L. Julian, Buncombe County, NC, Nov. 25 (Wayne Forsythe) and 75 at L. Robinson, Darlington County, SC, Nov. 25 (Lex Glover).

COMMON MERGANSER: One was rare at Huntington Beach St. Pk., SC, Nov. 24 (Jeanie Davis), and one was at Boot Lake, Transylvania County, NC, Nov. 16 (Norma Siebenheller). Also two were found at Jordan L., NC, again. There are apparently some resident Commons here, with an eclipse male and a female Aug. 23 - Sept. 27 (Rob Gluck).

OSPREY: One was late inland at L. Wheeler, Raleigh, NC, Nov. 22 (Josh Rose).

RED-TAILED HAWK: Rare anywhere in the Carolinas, a dark phase Redtailed was seen at Huntington Beach St. Pk., SC, Oct. 31 (Jack Peachey and Gary Phillips). The observers were not able to decide if it was a Harlan's form. **ROUGH-LEGGED HAWK:** One was briefly seen at Pea I. N.W.R., NC, Nov. 6 (John Wright *et al.*) during the Wings over Water Festival.

BROAD-WINGED HAWK: One was locally rare at Huntington Beach St. Pk., SC, Oct. 21 (Jack Peachey). Also one was a late migrant in Forsyth County, NC, Nov. 20, as noted by Linda & Larry Davis, *fide* Ramona Snavely. GOLDEN EAGLE: Two over Brevard, NC, Sept. 25 (*fide* Betty McIlwain) were good finds, but are almost expected in that part of the state. Much rarer were one over Pea I. N.W.R., NC, Oct. 24 (Keith Watson and Sidney Maddock) and singles at Huntington Beach St. Pk., SC, Oct. 11 (Jack Peachey) and Nov. 17 (Dennis Forsythe *et al.*).

MERLIN: This species migrated through in good numbers this fall. The best counts were 15 at Ft. Fisher, NC, Oct. 14 (Greg Massey) and an amazing 30 at Tibwin Plantation, Charleston County, SC, Oct. 9 (Craig Watson).

PEREGRINE FALCON: Watson also had an excellent one-day total for this species at Tibwin Plantation, SC, when he counted 59 on Oct. 9!

YELLOW RAIL: One was flushed and seen well at Falls L., NC, Sept. 5 (Will Cook) for the only report received.

PURPLE GALLINULE: One at Twin Lakes, Sunset Beach, NC, Aug. 22 (Barbara Gearhart) was a good find for this decreasing species.

COMMON MOORHEN: One at Jackson Park, Hendersonville, NC, Oct. 11 provided a first local record (Harvey Neal and Simon Thompson).

AMERICAN COOT: Two at Jordan L., NC, Aug. 2 were most likely summering individuals (Ricky Davis).

LIMPKIN: One was heard at close range at Roan Island in the Cape Fear R., Pender County, NC, Aug. 13 (Sam Cooper and Cheryl Mullen). This is the state's fourth report of the species and interestingly follows the July Limpkin near New Bern!

BLACK-BELLIED PLOVER: Inland reports included eight at Jordan L., NC, Oct. 18-25 (Ricky Davis, Will Cook and Rachel Harden); four at Falls L., NC, Sept. 19 (Randy Emmitt); two at Goldsboro, NC, Oct. 18 (Eric Dean); two at a Scotland Neck, NC, turf farm Sept. 17 (Frank Enders); one at Hooper Lane, Henderson County, NC, Sept. 8 (Tom Joyce and Wayne Forsythe); and one at the Orangeburg, SC, Sod farm Sept. 13 (*fide* Taylor Piephoff).

AMERICAN GOLDEN-PLOVER: This species was found in much larger than normal numbers this fall. See the table for the details.

Location	Dates	Count	Observers
Candor, NC, Turf Farm	8/18-9/15	1-2	D. Burk, R. Halpin, m. obs.
Sunset Beach, NC	8/23	1	K. Fiala
Greenville, NC	8/27-8/28	1	J. Wright, K. Harrell et al.
Scotland Neck, NC, Turf Farm	8/29-8/30	1	F. Enders, R. Davis
Speed, NC	8/30	3	R. Davis
C. Hatteras, NC	8/29-10/14	2-5	D. Andre, M. McDavit
Savannah Spoil Site, SC	9/2-9/25	1	S. Calver
Santee N.W.R., SC	9/5	1	T. Kalbach
Falls L., NC	9/5-10/4	1-3	R. Davis, L. Todd et al., C.
			Eley
Hooper Lane, NC	9/11-11/3	1-3	J. Wren, W. Forsythe, R.
			Emmitt
Winston-Salem, NC, W.T.P.	9/11	1	R. Hough, sev. obs.
Bird Shoal, Beaufort, NC	9/13	1	J. Fussell, S. Arrington
Polk County, NC	9/19	1	S. Thompson
Orangeburg, SC, Sod Farm	9/19	5	R. Carter, C. Eastman
Heath Springs, SC	9/20	1	M. Turner
Bucksport, SC, Sod Farm	9/24	1	T. Spires
Townville, SC	9/30	2	S. Wagner et al.
Cane Creek, Orange Co., NC	10/2	1	D. Shadwick
N. Topsail Beach, NC, Spoil	10/5-10/13	1	S. Shultz, N. Moore et al.
Latta, Dillon Co., SC	10/7	4	M. McDavit
Jordan L., NC	10/18	1	R. Davis
Pea I. N.W.R., NC	11/7-11/16	1	R. Davis, m. obs.

WILSON'S PLOVER: An impressive count of 100 Wilson's was had at Bird Shoal, Beaufort, NC, Aug. 8 (John Fussell).

SEMIPALMATED PLOVER: Some of the better inland reports were 24 at Jordan L., NC, Sept. 7 (Will Cook), 7 at Santee N.W.R., SC, Aug. 22 (Mike Turner), and four in Richland County, SC, Sept. 5 (Robin Carter and Caroline Eastman *et al.*).

PIPING PLOVER: Very rare were single Pipings at the Orangeburg, SC, Sod farm Aug. 8 & 16 (Steve Shultz, Judy Walker *et al.*) and at Jordan L., NC, Aug. 30 (Magnus Persmark, Judy Murray and Kent Fiala).

BLACK-NECKED STILT: Hurricane Bonnie brought one inland near New Bern, NC, Aug. 28, as noted by Wade Fuller. Also one was extremely late at Bear I. W.M.A., SC, Nov. 28 (Dennis Forsythe *et al.*).

AMERICAN AVOCET: Very rare inland were five at Jordan L., NC, Oct. 3 (Will Cook *et al.*), with one still present there Oct. 18 (Ricky Davis).

WILLET: Inland reports this fall included up to four at the Orangeburg, SC, Sod farm Sept. 5 (Robin Carter and Caroline Eastman *et al.*); one at New Bern, NC, Aug. 27 during Hurricane Bonnie (Bob Holmes and Wade Fuller), two at the McKinney L. Fish Hatchery, Richmond County, NC, Aug. 18 (Dick Burk), and one at the Goldsboro, NC, W.T.P. Aug. 1 (Eric Dean).

UPLAND SANDPIPER: This species was found in good numbers this fall. The best totals included a peak of 20 at the Orangeburg, SC, Sod farm Aug. 28 (Lex Glover); nine at the Sneads Ferry, NC, W.T.P. Aug. 19 (Nell Moore); eight at the Greenville, NC, Airport Aug. 30 (Brad and Steve Carlson); seven at the Cherry Hospital, Goldsboro, NC, Aug. 22 (Eric Dean); six at Mars Bluff, SC, Aug. 6-7 (Steve Patterson); and a peak of six at Hooper Lane, NC, Sept. 11 (Jennifer Wren). Also one was extremely late at Lattimore, Cleveland County, NC, Oct. 29 (JoAnn Martin, sev. obs.).

LONG-BILLED CURLEW: One was displaced inland to New Bern, NC, Aug. 27 by Hurricane Bonnie (Bob Holmes and Wade Fuller) for an unusual report. More expected were one at Ft. Fisher, NC, Aug. 8 (Barbara Gearhart) and up to two on Shackleford Banks near C. Lookout, NC, Aug. 22 - Oct. 2 (Jimi Moore, Bob Holmes and Wade Fuller).

HUDSONIAN GODWIT: Hurricane Bonnie occurrences included up to 16 at C. Hatteras, NC, Aug. 29 (Diane Andre, Brad Carlson), one at Greenville, NC, Aug. 27 (Ken Harrell, John Wright and Brad Carlson), one at New Bern, NC, Aug. 28 (Wade Fuller), and one at Huntington Beach St. Pk., SC, Aug. 29 (Lex Glover). Other reports involved one at Pea I. N.W.R., NC, Aug. 14 (Jean St. Jean), Oct. 11 (Ricky Davis), and Oct. 24 (Brad Carlson and Jamie Glydon) and one at the Savannah Spoil Site, Jasper County, SC, Sept. 9-11 (Steve Calver). MARBLED GODWIT: One was found inland south of Greenville, NC, Aug. 27 (John Wright), due to Hurricane Bonnie.

RUDDY TURNSTONE: Locally rare were two Sept. 21 and five Sept. 28 at Hooper Lane, NC, as noted by Wayne Forsythe and John Smith.

RED KNOT: The only inland report was of one brought in by Hurricane Bonnie at New Bern, NC, Aug. 27 (Bob Holmes and Wade Fuller).

SANDERLING: The peak inland total was 10 at Jordan L., NC, Sept. 7, as noted by Will Cook.

WESTERN SANDPIPER: Noteworthy inland reports included eight at Jordan L., NC, Oct. 25 (Will Cook and Rachel Harden), six at Broad River W.M.A., Fairfield County, SC, Aug. 15 (Mike Turner), and three near Estill, Hampton County, SC, Aug. 2 (Mike Turner).

WHITE-RUMPED SANDPIPER: Inland White-rumpeds included two at Goldsboro, NC, Aug. 27 (Eric Dean), one at Greenville, NC, Aug. 28 (Brad Carlson), one at the Orangeburg, SC, Sod farm Sept. 19 (Robin Carter and Caroline Eastman), and one near Latta, Dillon County, SC, Aug. 24 (Mike Turner). Also one was late at C. Hatteras, NC, Nov. 8 (John Wright *et al.*).

BAIRD'S SANDPIPER: Always noteworthy in the Carolinas, Baird's reports included one at the Orangeburg, SC, Sod farm Aug. 9 (Robin Carter and Caroline Eastman) and one at C. Hatteras, NC, Sept. 9 (*fide* Taylor Piephoff). The Falls L., NC, area was host to several during the period Sept. 10 (Ricky Davis) to Sept. 27 (Les Todd and Chris Eley), with the peak count being three Sept. 13 (Les Todd *et al.*).

PECTORAL SANDPIPER: Some excellent counts were had in the Carolinas this fall. The best totals were 400 at the Orangeburg, SC, Sod farm Sept. 4 (Lex Glover) and 179 at Jordan L., NC, Sept. 7 (Will Cook).

STILT SANDPIPER: Good inland reports included 20 at the Orangeburg, SC, Sod farm Sept. 4 (Lex Glover), ten were late at L. Mattamuskeet, NC, Nov. 15 (Harry LeGrand *et al.*), five were near the Congaree R., Richland County, SC, Sept. 5 (Robin Carter and Caroline Eastman), two were at Jordan L., NC, Sept. 19 (Will Cook), and one was near the Laurinburg/Maxton, NC, Airport Aug. 23 (Barbara Gearhart).

BUFF-BREASTED SANDPIPER: This species staged what was most likely a record migration through the Carolinas this fall. The number of locations and the counts of individuals were truly exceptional. See the table for the details.

Location	Dates	Count	Observers
Orangeburg, SC Sod Farm	8/16-9/19	1-4	J. Walker, R. Carter, sev. obs.
Goldsboro, NC, W.T.P.	8/22-8/23	1	E. Dean, G. Howe, J. Wright
Savannah Spoil Site, SC	8/26-9/25	1-20	S. Calver, M. Turner

Location	Dates	Count	Observers
Candor, NC, Turf Farm	8/28-9/15	1-6	D. Burk, S. Campbell, R. Halpin
Greenville, NC	8/28	1	B. Carlson
Hooper Lane, NC	8/28-10/4	1-22	C. Eley, S. Thompson et al.
Scotland Neck, NC, Turf			
Farm	8/30-9/22	2-3	R. Davis, F. Enders
Falls L., NC	8/31-9/13	1-10	C. Eley, L. Todd, sev. obs.
Winston-Salem, NC,			
W.T.P.	9/4-9/20	1-2	D. DeNeve, R. Snavely et al.
Santee N.W.R., SC	9/5	1	T. Kalbach
Oregon Inlet, NC	9/5	1	K. Watson
St. Helena I., SC, Sod Farm	ı 9/6	2	L. Glover
Jordan L., NC	9/7-10/18	1-2	W. Cook, R. Davis
Ocean Isle Beach, NC,			
W.T.P.	9/7-9/9	1	M. McDavit, C. Bush
Sneads Ferry, NC, W.T.P.	9/17-9/19	2	N. Moore, J. Moore
Polk County, NC	9/19	3	S. Thompson
C. Hatteras, NC	10/13	1	P. Moore et al.

RUFF: The rare and exciting Ruff was found three times in North Carolina. Singles were at Pea I. N.W.R. Aug. 10 (Michael Patten), the Sneads Ferry W.T.P. Aug. 19 (Nell Moore *et al.*), and Bird Shoal, Beaufort Sept. 12 (Bob Holmes *et al.*, and Rich Boyd).

SHORT-BILLED DOWITCHER: The best inland totals were 15 at Jordan L., NC, Sept. 7 (Will Cook), 11 at Falls L., NC, Aug. 23 (Ricky Davis and Les Todd), five near Chapel Hill, NC, Aug. 1 (Ginger Travis), four at the Orangeburg, SC, Sod farm Aug. 30 (Tim Kalbach), and three at the Scotland Neck, NC, Turf farm Aug. 10 (Frank Enders).

WILSON'S PHALAROPE: The Savannah Spoil Site in Jasper County, SC, normally has the most Wilson's present each fall. This year the peak count was 20 on Sept. 10-12 (Craig Watson). Other reports included singles at the N. Topsail Beach, NC, bridge spoil area Aug. 19 (Nell Moore), at Huntington Beach St. Pk., SC, Oct. 23 (Sharon and Phil Turner, Mary McDavit), and at New River Inlet, NC, on the late date of Nov. 15 (Bob Holmes).

RED-NECKED PHALAROPE: Hurricane Bonnie displaced several Redneckeds, with two at Sneads Ferry, NC, Aug. 27 (Clancy Ballenger, Jimi and Nell Moore), one at Greenville, NC, Aug. 28 (Brad Carlson), and one at C. Hatteras, NC, Aug. 28 (Diane Andre). Two were good finds at the Orangeburg, SC, Sod farm Sept. 4 (Bob Maxwell and Lex Glover). Also, 192 was an excellent offshore total out of Oregon Inlet, NC, Sept. 6 (Brian Patteson *et al.*).

RED PHALAROPE: One was rare onshore at the Savannah Spoil Site, SC, Oct. 4, as noted by Tim Kalbach.

SOUTH POLAR SKUA: The only reports involved one definite S. Polar off Hatteras, NC, Aug. 8 (Brian Patteson *et al.*) and an unidentified skua sp. off Oregon Inlet, NC, Aug. 9 (Harry LeGrand and Paul Guris *et al.*).

LONG-TAILED JAEGER: Totally unexpected was the adult Long-tailed found at the southern end of L. Norman, NC, on the evening of Sept. 9 (David & Marcia Wright). The bird was observed up close from a boat, and was last seen spiraling up and heading south out of sight! The only offshore sighting was of one off Oregon Inlet, NC, Sept. 5-6 (Brian Patteson *et al.*).

LAUGHING GULL: Five at Goldsboro, NC, Aug. 27 (Eric Dean) were most likely brought in by Hurricane Bonnie.

FRANKLIN'S GULL: This species staged an unprecedented migration in the east this fall. Sightings in the Carolinas included one at the Savannah Spoil Site, SC, Nov. 16 (Steve Calver), one at Hooper Lane, NC, Nov. 25 (Wayne Forsythe and Ron Selvey), one at Figure Eight I., NC, Nov. 27 (Derb Carter), and an astounding record total of 10 on L. Robinson, SC, Nov. 25 (Lex Glover).

BLACK-HEADED GULL: One was unexpected at the L. Mattamuskeet, NC, causeway Nov. 13 (John Fussell), for a most unusual report away from the immediate coast.

SABINE'S GULL: The only report was of an immature just off the beach at Figure Eight I., NC, Nov. 8 (Derb Carter). Sightings of this species in the Carolinas have been declining the last couple of years.

GULL-BILLED TERN: Hurricane Bonnie provided a very rare inland report of this species, with one being found at the Sneads Ferry, NC, W.T.P. Aug. 27 (Jimi and Nell Moore).

ROYAL TERN: Hurricane Bonnie birds included 12 at Goldsboro, NC, Aug. 27 (Eric Dean), three at Jordan L., NC, Aug. 27 (Jeremy Hyman), and one at Sneads Ferry, NC, Aug. 27 (Jimi and Nell Moore). Much more unexpected was one at Falls L., NC, Aug. 23 (Josh Rose), not associated with any storm.

SANDWICH TERN: Eight at New River Inlet, NC, were quite late on Nov. 15, as noted by Bob Holmes. Inland birds brought in by Hurricane Bonnie included four at Sneads Ferry, NC, Aug. 27 (Jimi and Nell Moore), two at Goldsboro, NC, Aug. 27 (Eric Dean), and one at Jordan L., NC, Aug. 27 (Jeremy Hyman).

SMALL STERNA TERNS: Good inland totals included 30+ Sterna sp., four Commons, and 12 Forster's at Falls L., NC, Sept. 5 (Josh Rose and Ricky Davis); 15 Commons and seven Forster's at L. Norman, NC, Sept. 4 (David and Marcia Wright); and six Forster's at Santee N.W.R., SC, Aug. 22 (Mike Turner). Hurricane Bonnie reports included 30+ Sterna sp. at Goldsboro, NC,

Aug. 27 (Eric Dean), eight Commons at Jordan L., NC, Aug. 27 (Jeremy Hyman), and six Forster's at the Sneads Ferry, NC, W.T.P. Aug. 27 (Jimi and Nell Moore).

ARCTIC TERN: One provided a rare fall sighting off of Oregon Inlet, NC, Sept. 5 (Brian Patteson *et al.*).

LEAST TERN: Two were brought in to the Goldsboro, NC, area by Hurricane Bonnie on Aug. 27 (Eric Dean), and one was rather late at the Savannah Spoil Site, SC, Oct. 7 (Steve Calver).

BRIDLED TERN: Onshore sightings of this species were caused by two different storms this fall. Hurricane Bonnie produced singles at Goldsboro, NC, (Eric Dean), Figure Eight I., NC, (Derb Carter), and in New Hanover County, NC, (Mark Galizio), all Aug. 27. Tropical Storm Earl beached two juveniles, one at Surf City, NC, Sept. 4 and another at Atlantic Beach, NC, Sept. 6 (*fide* John Fussell). Excellent numbers were had offshore also with 100 off Hatteras Aug. 9 and 91 off Oregon Inlet Sept. 5 (Brian Patteson *et al.*).

SOOTY TERN: Hurricane Bonnie Sooties included three at Jordan L., NC, Aug. 27 (Jeremy Hyman), three at Greenville, NC, Aug. 27 (John Wright), two at Figure Eight I., NC, Aug. 27 (Derb Carter), and several in New Hanover County, NC, Aug. 26 (Mark Galizio). Tropical Storm Earl produced two beached Sooties at Atlantic Beach, NC, Sept. 5 (*fide* John Fussell) and one near C. Lookout, NC, Sept. 5 (Fussell and Nell Moore *et al.*). The peak offshore count was five off Hatteras Aug. 8-9 (Brian Patteson *et al.*).

BLACK TERN: This species had one of its better migrations in the Carolinas this fall. The best counts were 250+ off Oregon Inlet Sept. 5 (Patteson *et al.*); 200+ at Sneads Ferry, NC, Aug. 27 (Jimi and Nell Moore) and L. Mattamuskeet, NC, Aug. 28 (Gene Howe), both due to Hurricane Bonnie; 50 at the Orangeburg, SC, Sod farm Sept. 4 (Lex Glover); 25+ at Goldsboro, NC, Aug. 27 (Eric Dean); and 15 at Lookout Shoals L., NC, Aug. 16 (Dwayne Martin).

BLACK-BILLED CUCKOO: The number of sightings of this species was about normal, with one at C. Lookout, NC, Sept. 5 (John Fussell, Rich Boyd and Nell Moore), two at Jordan L., NC, Sept. 19 (Jonathan Steere), up to two at Pea I. N.W.R., NC, Oct. 10-11 (John and Paula Wright, Ricky Davis), and one at the Savannah River Site, Aiken County, SC, Oct. 15 (Anne Waters).

YELLOW-BILLED CUCKOO: One was a late migrant at the Congaree Swamp Nat. Mon., SC, Nov. 1, as noted by Robin Carter.

OLIVE-SIDED FLYCATCHER: This species was found only three times in the Carolinas this fall, with singles at Campobello, SC, Aug. 19 (Chris Welch), near Mt. Pisgah, NC, Sept. 23 (Len Pardue), and at Bryson City, NC, Sept. 24 (Pete Worthington).

YELLOW-BELLIED FLYCATCHER: Reports included one near L. Marion, SC, Sept. 19 (Robin Carter and Caroline Eastman) and one at Mason Farm, Chapel Hill, NC, Sept. 16 (Will Cook).

LEAST FLYCATCHER: This flycatcher was identified several times this fall, with singles at Sneads Ferry, NC, Sept. 3 (Nell Moore), at Pea I. N.W.R., NC, Sept. 5 (Randy Emmitt), at Jordan L., NC, Sept. 7 (Will Cook), at Huntington Beach St. Pk., SC, Sept. 18 (Lex Glover and Steve Patterson), and near Spartanburg, SC, Sept. 19 (*fide* Lyle Campbell).

EASTERN KINGBIRD: One offshore of Oregon Inlet, NC, was an unexpected find on Sept. 6 (Brian Patteson *et al.*).

WESTERN KINGBIRD: Reports included one early at Ft. Fisher, NC, Sept. 5 (Sam Cooper), one at Carolina Beach, NC, Oct. 11 (Bruce Smithson, *fide* Taylor Piephoff), and one late at Hemingway, SC, Nov. 21 (John Snow).

SCISSOR-TAILED FLYCATCHER: This rare but expected species was found twice, with individuals at Huntington Beach St. Pk., SC, Aug. 10 (*fide* Jack Peachey) and at Buxton, NC, Oct. 17-27 (*fide* Keith Watson).

WHITE-EYED VIREO: Late inland sightings involved singles at Charlotte, NC, Nov. 15 (Louise and Larry Barden) and in eastern Guilford County, NC, Nov. 27 (Allen Bryan).

WARBLING VIREO: This species was found much more often than usual this fall. Reports, all of single birds, came from Simpsonville, SC, Sept. 9 (Pete Worthington), Roanoke I., NC, Sept. 10-11 (Jeff Lewis and Lee Yoder) and Sept. 30 (Jeff Lewis), Ft. Macon, NC, Sept. 12 (John Fussell and Susan Arrington), Broad River W.M.A., SC, Sept. 12 (Tim Kalbach and Nancy Lyman), along the New River, Watauga County, NC, Sept. 29 (Curtis Smalling), and at Laurinburg, NC, Sept. 30 (Barbara Gearhart).

PHILADELPHIA VIREO: This species continues to be reported with increasing frequency each fall. The highlights this year involved the earliest at Jackson Park, NC, Sept. 2 (Wayne Forsythe) and the latest at C. Lookout, NC, Oct. 2 (Bob Holmes and Wade Fuller).

TREE SWALLOW: Twelve were late for an inland location at L. Osceola, Hendersonville, NC, Nov. 5 (Wayne Forsythe and Bill Bart).

BARN SWALLOW: Three were somewhat late at C. Hatteras, NC, Nov. 22, as noted by Barbara Gearhart.

CAROLINA CHICKADEE: Two at C. Lookout, NC, Oct. 10 (John Fussell) were considered to be locally unusual for that barrier island site.

GRAY-CHEEKED THRUSH: The best total of this least common migrant thrush was four at Jackson Park, NC, Sept. 29 (Wayne Forsythe and Jim Edwards).

BLUE-WINGED WARBLER: One was rare and unexpected offshore of Hatteras, NC, Aug. 9 (Brian Patteson *et al.*). Other noteworthy coastal sightings

included one on Roanoke I., NC, Sept. 8 (Jeff Lewis), one at Ft. Macon, NC, Sept. 11-12 (John Fussell, Bob Holmes *et al.*), one at James I., SC, Oct. 5 (Dennis Forsythe), and one at the Savannah Spoil Site, SC, Aug. 30 (Tim Kalbach).

GOLDEN-WINGED WARBLER: Some of the more interesting reports involved two at Laurinburg, NC, Sept. 15 (Barbara Gearhart), one to two on Roanoke I., NC, Sept. 11-13 (Jeff Lewis), one near Chapel Hill, NC, Sept. 16-17 (Ginger Travis), one at the Congaree Swamp Nat. Mon., SC, Oct. 3 (Robin Carter and Tim Kalbach), and one at Landsford Canal St. Pk., SC, Sept. 12 (Lex Glover and David Dobson).

HYBRID WARBLERS: One each of the two Blue-winged X Golden-winged Warbler hybrid forms was reported this fall. A "Brewster's" was found near Asheville, NC, Sept. 7 (Len & Esther Pardue), and the much rarer "Lawrence's" was a good find on Roanoke I., NC, Sept. 10 (Jeff Lewis and Keith Watson).

NASHVILLE WARBLER: This warbler staged one of its better migrations in the Carolinas this year. Nashvilles were sighted across both states a minimum of 17 times. The earliest was at Falls L., NC, Sept. 5 (Ricky Davis), and the latest was at Pea I. N.W.R., NC, Oct. 24 (Brad Carlson and Jamie Glydon).

YELLOW WARBLER: One was late on the L. Mattamuskeet, NC, causeway Nov. 13 (John Fussell); a rare but not terribly surprising report for that well-known migrant-holding location.

CHESTNUT-SIDED WARBLER: Excellent migration counts included 15+ at Jackson Park, NC, Sept. 6 (Wayne Forsythe) and an impressive 53 at the Ridge Junction Overlook, Yancey County, NC, Aug. 30 (Dwayne and Lori Martin).

YELLOW-RUMPED WARBLER: One was quite early at Pea I. N.W.R., NC, Aug. 29, as noted by Brad Carlson.

BLACK-THROATED GREEN WARBLER: One was early at Rocky Mount, NC, Aug. 23 (Betty Davis), and one was late at Oregon Inlet, NC, Oct. 31 (Eric Dean). The best migrant count was the amazing 102 counted at the Ridge Junction Overlook Yancey County, NC, Aug. 30 (Dwayne and Lori Martin). **BLACKBURNIAN WARBLER:** Some of the better reports included two at Folly Beach, SC, Oct. 17 (Bob Wood *et al.*), one at Roanoke I., NC, Sept. 23-24 (Jeff Lewis), eight at Jackson Park, NC, Sept. 6 (Wayne Forsythe), and impressive 19 at the Ridge Junction Overlook, Yancey County, NC, Aug. 30 (Dwayne and Lori Martin).

BLACKPOLL WARBLER: One was slightly late at Pea I. N.W.R., NC, Nov. 9 (John Fussell).

CERULEAN WARBLER: The farther east you go, this species gets harder to find. Thus of note was one at Weymouth Woods, Southern Pines, NC, Sept. 9 (Barbara Gearhart).

SWAINSON'S WARBLER: One found at Jackson Park, NC, Sept. 16-20 (Wayne Forsythe *et al.* and Simon Thompson *et al.*) not only was a little late but also provided a first fall record for the park.

NORTHERN WATERTHRUSH: Twelve was an excellent one-day total at Eagle I., Wilmington, NC, Oct. 10 (Greg Massey). Also one was quite late at the Savannah Spoil Site, SC, Nov. 25 (Steve Calver).

LOUISIANA WATERTHRUSH: Another unusual offshore migrant was the Louisiana Waterthrush off of Oregon Inlet, NC, Aug. 15 (Brian Patteson *et al.*). **KENTUCKY WARBLER:** Rare coastal reports included one at C. Lookout, NC, Sept. 5 (John Fussell *et al.*) and one at Ft. Macon, NC, Sept. 29 (Bob Holmes).

CONNECTICUT WARBLER: Reports were down somewhat this fall, with single birds at Merchants Millpond St. Pk., NC, Sept. 2 (Floyd Williams), at Ft. Macon, NC, Sept. 11 (Bob Holmes), and in Jackson County, NC, Sept. 25 (Pete Worthington).

MOURNING WARBLER: It is a rare fall indeed when more Mournings are reported than Connecticuts. This fall singles were on Roanoke I., NC, Sept. 8-9 (Jeff Lewis), at Jackson Park, NC, Sept. 20 (Wayne Forsythe *et al.*), near L. Santeetlah, Graham County, NC, Sept. 24 (Pete Worthington), and at Eagle I., Wilmington, NC, Oct. 10 (Greg Massey).

WILSON'S WARBLER: Some of the better Wilson's reports included two at Roanoke I., NC, Sept. 9, Sept. 23, and Oct. 10 (Jeff Lewis); one at Falls L., NC, Sept. 27 (Les Todd); one at Laurinburg, NC, Sept. 15 (Barbara Gearhart); one in Richland County, SC, Sept. 13 (Tim Kalbach *et al.*); and one a little early at Jackson Park, NC, Aug. 30 (Wayne Forsythe).

CANADA WARBLER: Three was an excellent one-day count for an eastern location at Falls L., NC, Sept. 13 (Randy Emmitt).

YELLOW-BREASTED CHAT: Late were singles at Buxton, NC, Nov. 7 (Simon Thompson) and at Figure Eight I., NC, Nov. 27 (Derb Carter).

CLAY-COLORED SPARROW: Clay-coloreds had one of the best migrations in recent memory. Numbers at Pea I. N.W.R., NC, were impressive, with nine on Oct. 11 (Ricky Davis and Jeff Lewis), six Oct. 14 (Jeff Lewis and Keith Watson), four Oct. 24 (Brad Carlson and Jamie Glydon), and one as late as Nov. 7-8 (Taylor Piephoff *et al.*). Elsewhere, three were on Roanoke I., NC, Sept. 26 (Jeff Lewis), one was at Harker's I., NC, Oct. 2 (Wade Fuller), and several were at Ft. Fisher, NC, in late October (*fide* Taylor Piephoff). Much rarer inland were one near L. Pinehurst, NC, Oct. 19 (Dick Burk) and two at Broad River W.M.A., Fairfield County, SC, Oct. 10 (Tim Kalbach).

LARK SPARROW: This species was well-reported this fall. Two were on Roanoke I., NC, Sept. 12-13 (*fide* Jeff Lewis); singles were at Pea I. N.W.R., NC, Aug. 14 (Susan Josephs), Sept. 5 (Keith Watson), and Oct. 11-13 (Ricky Davis and Jeff Lewis); on C. Lookout, NC, Sept. 5 (John Fussell *et al.*); and at the Savannah Spoil Site, SC, Aug. 11 (Steve Calver). Inland sightings were one in Pitt County, NC, Nov. 22 (Ken Harrell) and at L. Pinehurst, NC, Nov. 23 (Dick Burk).

GRASSHOPPER SPARROW: Good late inland reports were the single Grasshoppers at Hooper Lane, NC, Oct. 25 (Wayne Forsythe and Bill Bart) and near Boiling Springs, Cleveland County, NC, Nov. 4 (JoAnn Martin).

HENSLOW'S SPARROW: Only one migrant was found this fall, at Huntington Beach St. Pk., SC, Nov. 25 (Jeanie Davis).

SHARP-TAILED SPARROW(sp.): Always noteworthy inland, a sharp-tailed sparrow was seen briefly in Moore County, NC, Oct. 29 (Jay Carter, *fide* Susan Campbell). It is assumed that most inland migrant sharp-taileds are Nelson's. LINCOLN'S SPARROW: Lincoln's Sparrows had one of their best migrations in the Carolinas in recent memory. Good one-day counts were three in eastern Edgecombe County, NC, Oct. 4 (Ricky Davis) and two at Broad River W.M.A., SC, Oct. 10 (Tim Kalbach). Other sightings of note included one at Jackson Park, NC, Oct. 4 & 18 (Wayne Forsythe and Tom Joyce), one at Pee Dee N.W.R., NC, Oct. 16-18 (Barbara Gearhart) and Nov. 20 (Dick Burk), one at Congaree Swamp Nat. Mon., SC, Nov. 8 (Dan and Cindy Tufford), and one at Jordan L., NC, Oct. 18 -25 (Ricky Davis, Bert Fisher, Les Todd and Leto Copeley).

WHITE-THROATED SPARROW: One was a little early on Roanoke I., NC, Aug. 27, as noted by Jeff Lewis.

WHITE-CROWNED SPARROW: This species also had an excellent fall, with some large counts including an amazing 300+ in one area at Piney Creek, Allegheny County, NC, Nov. 5-10 (James Coman) and 25 at Pea I. N.W.R., NC, Oct. 11 (Ricky Davis).

LAPLAND LONGSPUR: The Hooper Lane, NC, area once again had longspurs, with one there Nov. 7-15 and then 7-10 were there on Nov. 21 (Wayne Forsythe). Other sightings included three at Huntington Beach St. Pk., SC, from Nov. 27 on, as noted by Tim Kalbach and many others; and one at C. Hatteras, NC, Nov. 8 (Ricky Davis).

SNOW BUNTING: Reports of this species included up to nine at C. Hatteras, NC, Nov. 6-8 (Eric Dean, m. obs.); four at Oregon Inlet, NC, Nov. 7 (John Fussell and Ricky Davis); one still at C. Hatteras Nov. 22, and two still at Oregon Inlet Nov. 22 (Barbara Gearhart).

ROSE-BREASTED GROSBEAK: One was a late lingerer at a feeder in Transylvania County, NC, Nov. 1 (fide Norma Siebenheller). Also a good count

of 71 migrants was had at Ridge Junction Overlook, Yancey County, NC, Sept. 20 (Dwayne and Lori Martin).

DICKCISSEL: Reports included one at Wrightsville Beach, NC, Oct. 11 (Sam Cooper); two at Pea I. N.W.R., NC, Oct. 11 (Ricky Davis and Jeff Lewis); one at the Pea I. Visitor Center feeder Oct. 31 until at least Nov. 21 (Eric Dean, m. obs.), and one near Bahama, Durham County, NC, Oct. 3 (Tom and Janet Krakauer).

BOBOLINK: One was early near Gaffney, SC, Aug. 1, as noted by Jeanie Davis.

EASTERN MEADOWLARK: One was a surprise as it landed on a boat 15 miles east of Charleston, SC, Oct. 31 (John Huggins). After resting for about 10 minutes, the bird flew off toward land!

YELLOW-HEADED BLACKBIRD: An adult male was a good find in a large blackbird flock near L. Mattamuskeet, NC, Nov. 14-15 (Brad Carlson and Eric Dean).

SHINY COWBIRD: The only report was of a female at the Savannah Spoil Site, SC, Aug. 3 (Paul Sykes).

PURPLE FINCH: One was a very early migrant at Pea I. N.W.R., NC, Oct. 11, as noted by Ricky Davis.

RED CROSSBILL: A good find was the flock of 12 crossbills at Ridge Junction Overlook, Yancey County, NC, Sept. 12-20 (Dwayne and Lori Martin). Another unexpected sighting was of one along the Cherohala Highway in Graham County, NC, Sept. 24 (Pete Worthington).

EVENING GROSBEAK: The only report for the whole fall was of a lone female at Lugoff, SC, Nov. 29 (Lex Glover), obviously a lost individual!

Carolina Bird Club Web Site http://members.aol.com/cbirdclub

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Extinction, Extirpation, and Range Reduction of Breeding Birds in North Carolina: What Can be

Learned?

David S. Lee North Carolina State Museum of Natural Sciences P.O. Box 29555 Raleigh, North Carolina 27626

Despite current conservation concerns for our native avifauna, relatively few species that are known to have nested in North Carolina within the historic period have become extinct, extirpated, or reduced in overall distribution. Considering the extensive logging that occurred in all parts of the state prior to this century, and subsequent changes in land use, it is surprising that more of our breeding fauna was not lost. Actually, the state's breeding fauna has increased in diversity, and many species have expanded their distribution considerably in the last century. Based on a current breeding fauna of approximately 200 species, we have had a 45% increase in avifaunal diversity and less than a 6% reduction in breeding species or their distributions during the past 100 years (North Carolina State Museum [NCSM] files, this study). Of the twelve species discussed here, the majority exhibit distributional changes that have been as much a result of the dramatic nature of the birds themselves in response to changing conditions as it has to negative effects of human alteration of landscapes. This is not to say that current major conservation issues are unimportant or that the increased faunal assemblage is adequate repayment for species lost. Nonetheless, what is interesting is that our original indigenous avifauna has remained relatively intact despite what we have done to the natural landscape. Not only has the original fauna itself remained mostly unchanged, but few species (<6% of the cumulative total) even show a decline in overall breeding distribution within the state.

This paper reviews faunal losses and range reductions of breeding birds on both specific and subspecific levels and briefly discusses the causes for those declines. The species addressed are a combination of extinctions, widespread range reductions, and regional range contractions. Interpretation of events is complicated by corresponding prior breeding range expansion in some of these same species. Rarity *per se* is not discussed. The focus is only on negative distributional changes for avian species within the historic period in North Carolina. For discussions of rare and endangered species in the state see Lee and Parnell (1990). Maps denote historic and current ranges. Cut-off dates for

current vs. historic vary (1970 to 1985) to allow some latitude in illustrating distribution changes.

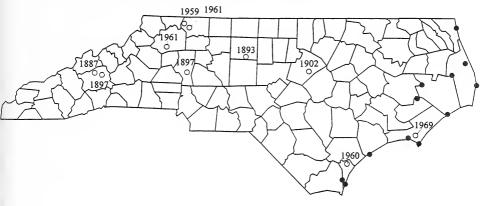
Common Merganser (Mergus merganser)

The Common Merganser breeds throughout the forested boreal Holarctic. In eastern North America it presently nests only sporadically south of New England. Brimley (1941) reported the species as nesting in Chowan County, N.C., in 1938. Kiff (1989) reviewed historical information, obtained unpublished museum egg data, and concluded that the species historically nested throughout much of the southeastern United States. He mentioned records from western Pennsylvania, West Virginia, Virginia, and Tennessee, and he cited a report from Audubon of nesting in Kentucky. Thus, it appears that nesting in the South was formerly widespread and that the local decline of these birds corresponds with the time beavers (*Castor canadensis*) disappeared from the region. Common Mergansers also experienced a breeding range contraction in Europe in this same general time period.

Black Rail (Laterallus jamaicensis jamaicensis)

As a breeding species, these small rails now appear to be confined to salt marshes in the state's coastal counties. In the late 1800s and early part of this century they were reported from a number of inland freshwater marshes and meadows (Fig 1). Pearson et al. (1942), in addition to the coastal sites, reported them from Wake County (Walnut Creek; eggs and chicks, 1890 to 1902), Guilford County (near Jamestown; eggs, 1893), and Iredell County (Statesville; pre-1897). Smithwick (1897) reported eggs taken at Statesville and Asheville. The latter is certainly the same as the 1887 Weaverville egg record of Carins. Oberholser (1905) noted breeding Black Rails as rare in middle and western sections of North Carolina and was unaware that the species nested in coastal areas. (Many of Smithwick's [1897] and Oberholser's [1905] statements are based on the works of John Carins. I have simply chosen to cite the more recent and thereby presumably more complete records.) The wet meadows where these rails occurred in Wake County, and probably those elsewhere, were cut annually for hay. Thus, at inland sites the rails probably were not nesting in natural plant communities, although it is possible that prior to the late 1800s abandoned beaver ponds provided suitable inland habitat. With the change from horse-powered equipment to tractors, most wetlands being used for agricultural purposes were drained because tractors did not work well in wet soils. Today there is no way to determine whether the open wet grassy areas that existed in the state under natural regimes formerly supported Black Rails. In 1959 and 1961 there were a few reports of breeding, or suggested breeding, in the northwest part of the state (Chat 23:87, 25:45). No subsequent reports have

been published. There is also a report from Polk County in 1990 (Chat 54:44), but the April date suggests the bird was a migrant. It appears that currently these rails do not use wetlands of the Piedmont and Blue Ridge province. A lot of effort has gone into the search for Bog Turtles (*Clemmys muhlenbergii*) in North Carolina and elsewhere in the Southeast (Tryon and Herman 1990). Although the small, isolated wetlands in the Piedmont and mountains used by these turtles seem superficially acceptable to Black Rails, none have been detected. It appears that Black Rails expanded their breeding distribution into inland sites as a result of post-Civil War agricultural practices and disappeared from those sites when agricultural practices changed.



- indicates post-1970 breeding records
- O documented former nesting record

Fig 1: Historic and current breeding distribution of the Black Rail in North Carolina

Peregrine Falcon (Falco peregrinus anatum)

Breeding populations of Peregrine Falcons are believed to have been extirpated from the eastern United States by 1964. Most authorities state that they were never a common breeder in the southeastern states, yet Brewster (1886) reported that "Nearly every suitable cliff on the higher mountains (western North Carolina) was occupied by a pair of these noisy Falcons." Berger et al. (1969) drove more than 13,000 miles in 1964 checking 133 known nesting sites in the eastern United States and failed to locate a single active nest. In North Carolina four of the eight known nest sites were inactive by 1940, and the last active nest in the state was reported in 1957 (Hickey 1969). Records compiled by the N.C. Wildlife Resources Commission indicated a total of ten

active eyries in the state between 1887 and 1957 (Chris McGraft pers. com.). The species was reported to breed at Devil's Courthouse (ca. 1957) and Looking Glass Rock (1954), Transylvania County; Grandfather Mountain (1930), Avery/Caldwell/Watauga counties; Linville Gorge (1951), Burke County; Whiteside Mountain (1934), Jackson County; Brinegar's Cabin (1953-54), Wilkes County; Mount Mitchell (1894), Yancey County; Roan Mountain (1934), Mitchell County; Jump Off (1932), Swain County; and Pilot Mountain (1892), Surry County. Four additional breeding-season records exist for the state. Pearson et al. (1942, in 1958 edition) reported breeding season birds at Blowing Rock, Watauga County; Craggy Pinnacle, Burke County; Ronda, Wilkes County; and Highlands, Macon County. The Highlands report was verified through another source by Ganier (1934). The species continued to be reported during the breeding season in western North Carolina through the mid-1970s, but no nests was ever located. Historic eyries and sites of breeding season occurrence are shown in Fig. 2.

Releases of captive-bred young Peregrine Falcons into the Southeast were started in the 1980s. The first birds were released in North Carolina in 1984, and hacking of captive-bred Peregrine chicks continued though the late 1990s. Successful breeding pairs have become established at several of sites in the Blue Ridge Province. Unfortunately, the indigenous subspecies was not initially used for the release, and the founding stock comprised intergrades of various races. The program has been successful, and the species was proposed for removal from the federal endangered species list in 1998. The native race, however, has been regionally extirpated from the wild.

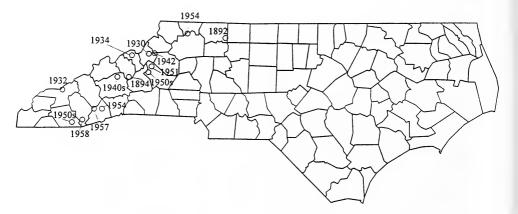


Fig 2: Historic breeding sites for the Peregrine Falcon in North Carolina. Dates are the last recorded occurrence of indigenous populations.

Carolina Parakeet (Conuropsis carolinensis corolinensis)

There are few published records of this species in North Carolina to document the distribution and breeding status prior to the bird's extinction. McKinley (1979) compiled the historic literature pertaining to the Carolina Parakeet in North Carolina. There are no reports from outside the Coastal Plain. and the last mention of the species in the state was in 1782 (Fig. 3). However, the Carolina Parakeet still occurred elsewhere in the region in the mid 1800s (i.e., Maryland on the Potomac River in 1866 and South Carolina, perhaps through the 1930s; Lee 1984 and discussion in McKinley 1979). North Carolina reports include Roanoke Island, Dare County, 1588 (Hariot 1588), the lower Cape Fear River (below Fayetteville, probably Bladen County area), 1664, Capt. William Hilton (Salley 1911); 1709, no specific locality (Lawson [1709] 1967): Brunswick/New Hanover County, 1730, Hugh Meredith (1922); Edenton, Chowan County, plate in a 1737 edition of John Brickell's The Natural History of North Carolina [1737] (1911); and Council, Bladen County, 1761-1765 and 1770-1772 (implied, Bartram 1791). William Bartram's journal refers to North Carolina, "where they are very numerous." Catesby reports Carolina Parakeets from 1731 in North Carolina, with no specific locality (in Smithwick 1879). Colonel William Byrd (1929) mentioned that "paragueets" frequently raided fruit trees in the fall in North Carolina, but he did not provide any specific localities. Accounts of Meredith and others refer to occurrence in the summer and fall, suggesting the species may have been partly migratory in the northern portion of its range. The species is reported as lost as a result of excessive hunting, but deforestation must have also been a factor.

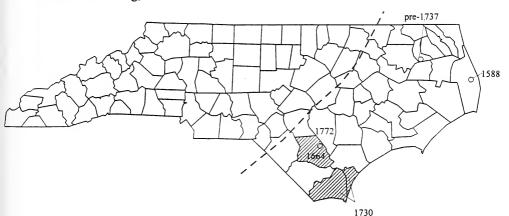


Fig 3: Historical distribution of the Carolina Parakeet in North Carolina

Ivory-billed Woodpecker (Campephilus principalis)

This large woodpecker is believed to be extinct on the North American continent. The last reliable reports are from central Florida in the late 1960s (Agey and Heinzman 1971). Another race endemic to Cuba is still extant but highly endangered. Tanner (1942) reviewed the biology and distribution of these woodpeckers and, in the absence of specimens, recognized only a single record for North Carolina. It is of three specimens collected by Wilson near Wilmington in 1809 (Wilson 1811). The specimens are no longer extant. Coues and Yarrow (1871 in Smithwick 1897) refer to reports from near Fort Macon, North Carolina. These reports are not based on specimens, and no specific information was provided. Based on the distribution of local plant communities on the outer coastal plain of the state, it seems highly probable that the species was not limited to just the Wilmington area in former times. Hasbrouck (1891) considered the Fort Macon report to be the northernmost site of occurrence (Fig. 4), whereas, Audubon (1838-1843) stated that the species ranged as far north as southern Maryland (never confirmed). The Ivory-billed Woodpecker is one of the few historically occurring bird species that probably was in decline in the pre-Columbian period. Native Americans prized the bills, which were used for trade. Contrary to most recent accounts, this bird was historically a resident of open mature pine forest in the Southeast (Allen and Kellogg 1937),

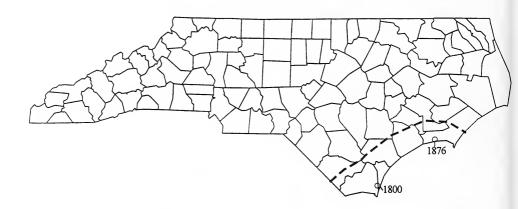


Fig 4: Historic distribution of the Ivory-billed Woodpecker

and swamp forests (see Tanner 1942) were probably only peripheral habitats. Reliance on mature trees and a need for large tracts of forests resulted in disappearance of the species. From the 1940s through the 1970s there were occasional reports of sightings of this species in eastern North Carolina (NCSM records). There is no way to evaluate the reliability of those reports, and at this point no purpose is served in trying to validate or refute them.

Red-cockaded Woodpecker (Picoides borealis)

There has been a general reduction of Red-cockaded Woodpecker colonies throughout the range of this endangered species (Federal Register 16047, 13 Oct. 1970). The same is true in North Carolina along the western and northern limits of the bird's distribution in the state. The recent loss of colonies is pronounced to the extent that, based on the distribution mapped by Walters and Carter in Lee and Parnell (1990), the overall historic geographic range has declined by as much as perhaps 25%. To what degree this loss represents recently colonized areas is unclear. Lumbering and loss of cotton crops to boll weevils resulted in pines reclaiming land that in pre-colonial times was hardwoods. As those pine woods matured, they were colonized by Redcockaded Woodpeckers, resulting in some degree of local range expansion. By the 1970s many of these same areas were reverting back to hardwoods. This scenario is certainly typical for the central and northern Piedmont, but how this relates to the northern Coastal Plain is unclear. Historic accounts provide no information to define the earliest limits of the geographic distribution of the Red-cockaded Woodpecker in the state.

Common Ground-Dove (Columbina passerina passerina)

In the early 1900s breeding ground-doves were unknown from North Carolina. In the 1930s two pairs were found in New Hanover County, but nesting was not confirmed (Carolina Beach 1930; Fort Fisher [Burleigh 1937]). Thus it seems likely that this dove had only recently expanded its breeding range into North Carolina in the 1930s. By the mid-1970s the species nested along the coast at least as far north as Topsail Island. It was known to breed in Brunswick, New Hanover, and Pender counties of N.C. and was reported as a summer resident as far north as Carteret County (NCSM records, Potter *et al.* 1980; Fig. 5). In the early 1980s the species underwent a sharp local decline. During the museum's Breeding Bird Atlas program (1988 -1992), no breeding records were obtained in the state. While individuals still wander northward during the post-breeding season, there no longer appears to be any indication of nesting in the state. Extensive commercial and residential development of barrier islands along the southeastern coast of North Carolina seems unlikely to be the primary cause of decline. Common Ground-Doves regularly nest in

yards and feed on lawns. Furthermore, stretches of undeveloped barrier islands continue to provide suitable habitat. Feral and outdoor house cats are believed to be a major problem for this species in developed coastal areas.

The expansion of the Common Ground-Dove into North Carolina in the 1930s appears to be its second documented invasion of the state. The species was apparently absent throughout much of the 1800s. Coues (1871) did not record it from Fort Macon, and Atkinson (1887) did not include it in his catalogue of the birds of North Carolina. Smithwick (1897) reported a late 1800s nesting record from Davidson County. The record, which was supported with eggs, was not referred to by subsequent authors. Those eggs, combined with records from this same period from the mountains (*i.e.*, Cairns, 29 May 1881, and another shot some years previously; *in* Oberholser 1905), suggest the species was for a time a widespread, but uncommon, breeding bird in North Carolina.

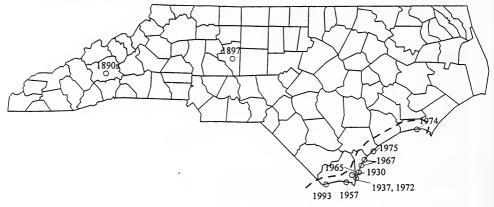


Fig 5: Former breeding distribution of the Ground Dove in North Carolina

— — Dashed line indicates limits of breeding range in this century

Olive-sided Flycatcher (Contopus borealis)

This boreal flycatcher is an uncommon migrant in North Carolina. It nests in the mountains primarily above 3,500 feet (Fig. 6). In the Great Smoky Mountains National Park, it is still found sparingly as a breeding bird. There are nesting reports from as recently as 1998 from the park (T. Simons pers. comm.). Prior to the 1930s it was more common and widespread in the Southern Appalachians, and even as recently as the 1960s Stupka (1963) considered it "by no means a rare breeder." Its late northern migration (19 April

to 7 June) and early fall migration (as early as 11 August) present difficulties in identifying nesting areas with certainty. Olive-sided Flycatchers are present on territory from at least 13 May to 30 June, and three young begging food were seen at North Wilkesboro as late as 12 September (Chat 33:28). The species was formerly reported breeding at Black Mountain, Highlands, Great Craggy Mountain, Roan Mountain, North Wilkesboro, and in the southeastern corner of Macon County. It has been found in the breeding season in Joyce Kilmer Memorial Forest and on Grandfather Mountain (Lee 1997, Lee 1985) and Linville Gorge (LeGrand *in* Lee and Parnell 1990), but nesting was not established. Thus, this species has disappeared from most of the southern portion of its range, and the few nesting pairs remaining in the Great Smoky Mountains National Park are now disjunct by several hundred miles from extant populations to the north.

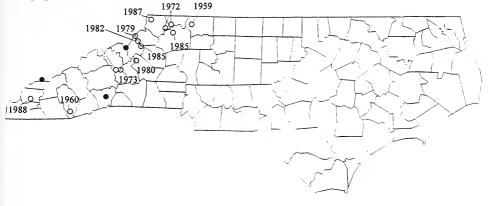


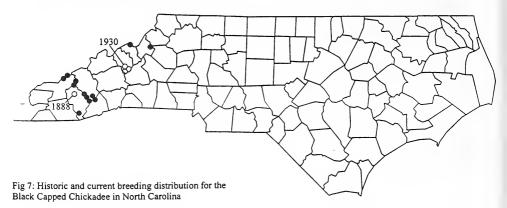
Fig 6: Former and current breeding season reports of the Olive-sided Flycatcher in North Carolina

post 1990 reports

Black-capped Chickadee (Poecile atricapillus practicus)

This race is an Appalachian endemic. Populations in the Southern Appalachians are small, isolated relicts restricted to high-elevation "islands" mostly above 4,500 feet (Fig 7). The species was extirpated from the Black Mountains by the 1930s as a result of extensive logging (Tanner 1952; specimen NCSM 3294). Despite the regrowth of the forest and proximal extant populations, this mountain range has not been recolonized. Jefferies and Jefferies (1889) collected a specimen in second-growth oaks and scattered pines "a little below Sylva" (below ca. 2,000 feet) on 15 May 1888, indicating the

species was not always restricted to high elevations. South of central Virginia and West Virginia the species is now restricted to high-elevation areas on Mt. Rogers in Virginia, the Plott Balsams, and the Great Smoky Mountains National Park. Black-capped Chickadees possibly occur on Grandfather Mountain (Lee et. al. 1985) and Beech Gap (Haywood County; NCSM specimens), but genetic identity of individuals at those sites needs to be established (see discussion in Lee and Browning ms). It has been reported by Johnston (1971) to hybridize with Carolina Chickadees (P. carolinensis) in Virginia. There are management problems facing the extant populations (Lee and Browning in ms).



= Current

0 = Historic

Bewick's Wren (Thryomanes bewickii altus)

The endemic Appalachian race of the Bewick's Wren is believed to be extinct. The last documented reports of breeding are from western Maryland (Robbins and Boon 1984) and West Virginia (Hall 1983), where it was last detected in the early 1980s. At one time Bewick's Wrens were very common in western North Carolina, nesting to the tops of the highest peaks (Oberholster 1905). Brewster (1886) considered it to be one of the most abundant birds in western North Carolina, nesting in nearly every out-building in Asheville. Ganier (1933) described it as very common in Tennessee. The species apparently expanded its range within the historical period and also occurred at scattered locations in the Piedmont of Virginia, North Carolina (Fig 8), South Carolina, and Georgia (Lee and Browning in ms). In the 1930s the range began

to contract, and the last documentation of birds on breeding territory in the Southeast was in 1971 on the Blue Ridge Parkway near Mt. Pisgah, N.C. (Chat 35:115, 47:110). Several subsequent reports were less well documented (*i.e.*, Chat 45:106). Simpson (1978) reviewed the history of this wren in North Carolina and discussed ecological factors possibly contributing to its decline.

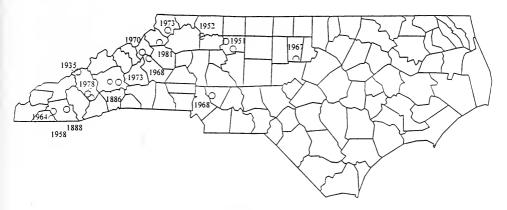


Fig 8: Historical breeding distribution and breeding season reports of the Bewick's Wren in North Carolina

Bachman's Sparrow (Aimophila aestivalis bachmani)

As a result of lumbering during the late 1800s and early 1900s, Bachman's Sparrows made a rapid northward range expansion into Kentucky, Tennessee, southern Ohio, and southwestern Pennsylvania (Weston 1968). Habitats occupied included shrub thickets and old fields, and once at an elevation of 3,000 feet in the spruce/fir zone of West Virginia (Weston 1968). The species was absent from these areas for most of the 1800s. For example, even by the late 1800s Atkinson (1887) considered this species to be only a rare summer visitor to North Carolina, but he was probably unaware of southeastern Coastal Plain populations, which were almost certainly present in this period. In the 1890s this sparrow was reported as a breeding species in Buncombe, Guilford, Orange, and Wake counties (Smithwick 1897). Carter and Walters (in Lee and Parnell 1990) mapped the known breeding localities for this species in North Carolina. Today the range has contracted to that of former times. Bachman's Sparrows are mostly confined to fire-maintained wiregrass (Aristida stricta) savannas in longleaf pine (Pinus palustra) forests in the southeastern and south

central portions of North Carolina. The sparrow is now rare or absent from the northern Coastal Plain, and it is rare and declining in the Piedmont.

Vesper Sparrow (Pooecetes gramineus)

Vesper Sparrows are currently rare breeding residents at scattered sites in the Blue Ridge Province of North Carolina. Their local ancestral distribution was relict and peripheral and probably restricted to grassy balds and other natural successional openings in high- and mid-elevation areas of the mountains. In the 1970s it bred southward at least to Buncombe and Haywood counties (Potter *et al.* 1980) and southern Jackson County (Chat 39:98). Smithwick (1897) reported breeding birds as far east as Greensboro (1 June 1893). There are former breeding records from near Asheville, Blowing Rock, Transylvania County (Oberholser 1905), Rocky Mount (Pearson *et al.* 1942) and Wilmington (Potter *et al.* 1980). See Fig. 9. This species nests in pastures and in cultivated and abandoned fields. It apparently expanded its distribution eastward into the Piedmont and Coastal Plain as a result of agricultural practices around 1900. Its distribution within the state appears to have reverted to its ancestral one.



Fig 9: Historic and current breeding distribution of the Vesper Sparrow in North Carolina

- indicates a breeding record post-1980
- O documented former nesting record

Other Species

Other species could be included in this list, but their total geographic area of decline was small, or their period of expanded occupancy was brief. They typically represented peripheral distributions within the state: *i.e.*, inland

heronries and several inland site-specific reports of breeding rails. The Roseate Tern (*Sterna dougallii*) has been reported as nesting twice in North Carolina (Soots and Parnell 1974 and Lee and Parnell 1990), but nesting colonies were never established.

Chuck-will's-widows (*Caprimulgus carolinensis*) are being replaced by Whip-poor-wills (*C. vociferus*) in some Coastal Plain areas, and Painted Buntings (*Passerina ciris*) have had a minor decline in distribution from their previously northern-most breeding sites.

The Loggerhead Shrike (*Lanius ludovicianus*), which was not discussed in this study, has also undergone a modification of its range. In the late 1800s it was considered to be only a rare winter visitor (Atkinson 1887). As a breeding species it invaded the state around 1900, remaining uncommon and restricted in overall distribution in North Carolina in the early part of the century. As its overall geographic breeding distribution gradually increased, its center of distribution within the state shifted to the south and west. Its current distribution and abundance is largely a result of land use, and, excluding the Sandhills region, is not an artifact of natural community structure.

Bachman's Warblers (*Vermivora bachmani*) were known from the state during what should have been their breeding season (Brimley 1891), but there is no evidence they ever nested here. The loss of migrant species and winter residents, while not a topic of this study, is even more limited than the loss of the breeding fauna.

Discussion

Populations and species distributions are constantly shifting as birds respond to natural and man-made environmental change. The question is whether these changes are occurring at alarming rates that will become irreversible. This question applies equally to both range contractions and expansions, though most concerns have been of the former. The present paper treats only losses. However, in many cases the range expansions are affecting original indigenous breeding populations. Ultimately, the two issues must be addressed simultaneously.

Despite growing conservation concerns for our indigenous avifauna, very few birds have disappeared as breeding species from the state (<3 %), and for ones still occurring in the state, few have exhibited significant reductions in their overall area of geographic occurrence (<2.5 %). Several are high-profile species (Ivory-billed Woodpecker, Carolina Parakeet, and Peregrine Falcon), and some of the others have become high-profile birds because of their rarity, recent decline, or endangered status.

It is difficult to characterize these birds as a group. Seven to eight of the twelve species discussed have or had populations that are peripheral to their

current centers of distribution. Breeding Common Mergansers, Olive-sided Flycatchers, Black-capped Chickadee and Vesper Sparrows are peripheral, but their occurrence in North Carolina represents relicts of Pleistocene events. For only three of the species discussed (Carolina Parakeet, Red-cockaded Woodpecker and the Appalachian race of the Bewick's Wren) has North Carolina historically been an important component of the bird's total natural range.

Distributional changes did not occur just within the political boundaries of North Carolina. Most of the extant species discussed here have shown similar reductions in range in other mid-Atlantic and southeastern states. In many cases the range reductions in other states in the region were more extreme than those shown in North Carolina (*i.e.*, Vesper Sparrow in Maryland; Robbins and Blom 1996).

One bird species and two subspecies discussed here are extinct or considered to be extinct. The extinct species is the Carolina Parakeet. The two extinct subspecies discussed here are the North American race of the Ivory-billed Woodpecker (Campephilus principalis principalis) and the Appalachian race of the Bewick's Wren (Thryomanes bewickii altus). Thus, approximately 2.5% of the state's former breeding bird fauna is extinct. One extant species of the birds discussed here, the Red-cockaded Woodpecker, is listed as endangered by the US Fish and Wildlife Service. The Black-capped Chickadee is represented by a regionally endemic subspecies.

None of the species discussed here are range limited: All are, or were, wide-ranging on both specific and subspecific levels. The merganser and falcon have Holarctic distributions. The dove ranges through the southern United States, the West Indies, and into South America. The flycatcher, chickadee, wren, and Vesper Sparrow range throughout much of temperate North America. The parakeet, both woodpeckers, and Bachman's Sparrow occurred throughout most of the southeastern United States and lower Mississippi basin. The Black Rail is primarily a species of the eastern seaboard, but it also nests in the north-central states.

The reasons for decline are varied. There is no common theme to the range reductions or disappearance of these birds from North Carolina, other than most appear to be related to man's activities. The species themselves represent a variety of orders and families and share no common geographical distributional patterns. Four species are southeastern, two are boreal, one occurs throughout most of the United States, and two have global distributions extending well outside of North America. These birds do not share similar habitat requirements, and all have distinctive ecological roles and occupy a variety of trophic levels. The species discussed include sedentary species, short range migrants, and neo-tropical migrants.

Much of the change in bird distributions during the last century results from the dynamic nature of the birds themselves. Five to seven of the species discussed here actually expanded their distributions within the state as a result of past land-use practices, only later to retract to ancestral distributions when the man-induced factors causing landscape change were no longer in place. Pioneering in birds is a well established behavior, and it is natural that many of the pioneering species are inevitability unsuccessful. Black Rails benefitted from the creation of mowed wet meadows used for hay harvest and disappeared from the interior portions of the state when this practice became outdated. Four other species apparently expanded their range into or within North Carolina within historic times and contracted back to ancestral distributions (Common Ground-Dove, Red-cockaded Woodpecker, Bachman's Sparrow, and Vesper Sparrow). The ground-dove had previously expanded its range into the state in the 1880s as well. The reasons for both the expansion and contraction of the ground-dove in North Carolina are unclear. The Red-cockaded Woodpecker benefitted from an emerging successional Loblolly Pine (Pinus taeda) forest that grew up in the Piedmont on abandoned farms after continual failure of cotton crops resulting from boll weevil damage. The wide-scale abandonment of farm land in the early part of this century resulted in pine forests that were maturing in the 1970s. Those forests are now being succeeded by hardwood forests, while much of the Piedmont is also undergoing rapid development. Both factors were detrimental to the expanded ranges of Red-cockaded Woodpeckers and Bachman's Sparrows. Additionally the Appalachian Bewick's Wren rapidly expanded its distribution throughout the mountains and well into the Piedmont as a result of land clearing for small farms, only later to be eliminated partly through competitive exclusion by the House Wren (Troglodytes aedon). The House Wren, a species that formerly did not occur in North Carolina as a breeding species (e.g., Smithwick 1897), or occurred only rarely, was ultimately more successful in exploiting developed landscapes. The House Wren invasion, however, does not explain the loss of Bewick's Wrens from its primoral habitat.

While man-induced habitat change, mainly from logging, resulted in the expansion of some species, it caused the decline of the Ivory-billed Woodpecker, Olive-sided Flycatcher, and Black-capped Chickadee. An 1888 report of Jeffries and Jeffries (1889) suggests that the Black-capped Chickadee may not have been as dependent on high elevation habitats in the past as it is today. Logging of mature forests and the suppression of fire from fire dependent plant communities resulted in the decline of the Red-cockaded Woodpecker and Bachman's Sparrow, but for the contractions of distribution discussed here, the decline is more a result of the unstable nature of maninduced communities on the Piedmont. Pesticides, collecting birds for falconry,

and in earlier times the removal of eggs by collectors from established eyries were, in part, responsible for the decline of the Peregrine Falcon in eastern North America, while hunting and pest control resulted in the disappearance of the parakeet.

The timing of historical extinctions and range retractions of breeding birds in North Carolina is protracted, and there seems to be no single time period that accounts for the declines. The last report of a Carolina Parakeet was in 1782, but based on other reports from the Southeast, it is possible that the species survived in North Carolina through the mid-1800s. The last known credible reports of Ivory-billed Woodpeckers were from the 1800s, although it is possible that the species persisted in the southeastern portion of the state into the 1900s. The last known nesting of the indigenous eastern race of the Peregrine Falcon was in 1957, and the Appalachian race of the Bewick's Wren was last reported as breeding in North Carolina in 1971. All of the other species discussed here (except the Common Merganser and Common Ground-Dove) still breed in the state, and some currently occupy much of their ancestral range.

Extinction and local disappearance of native species is something that should be viewed with concern. When carried to extreme, we are left only with the monotonous uniformity of a few hardy, adaptable species. Yet, in some areas faunal assemblages have been shown to be stable for at least a half-century (Haney et al. 1998). Furthermore, local avian diversity is actually increasing in North Carolina. Today, North Carolina has a breeding avifauna which is approximately 45% richer (expansions into and within the state) than what was believed to be here in the pre-colonial period. Still, who would think that the addition of cowbirds, grackles, House Finches, and other ubiquitous species to the state's fauna, or the expansion of various species of swallows throughout North Carolina, is adequate repayment for the loss of Ivory-billed Woodpeckers and Carolina Parakeets?

The popularity of the term biodiversity is in many ways unfortunate in that most people are only aware of the portion of the concept dealing with documentation of large species assemblages. Consequently, many conclude through the logic of simple arithmetic that three is better than two or that 208 (approximate current number of breeding species recorded for North Carolina) is better than 159 (approximate number of historically reported indigenous breeding species). Along similar lines the ranking of species by assigned relative importance within an area (e.g., the Blue Ridge, or the state of North Carolina) and the totaling of the rankings of specific faunas to document important faunal assemblages (e.g., Partners in Flight ranking scores) can give high marks to areas and habitats that have become infested with immigrant species. In fact in some cases, because rankings are done on regional levels, new arrivals have been assigned numerical values which are as high as those

of the original indigenous species. Such may be faunal assemblages worthy of management, but seldom do they reflect the composition of the historical avifauna.

Some of the faunal elements discussed here can never be restored, and for others restoration may be impractical or unwise. The concept of managing for primoral faunal assemblages is unrealistic even if we could know what those assemblages were. This is not a simple exercise in assimilating pre-colonial lumbering landscapes. Prior to European contact, eastern North America had been drastically modified by native Americans during a 12-15,000-year occupancy of the continent. What time period would one use as a base line for management?

Long-range conservation strategies cannot continue to be reactive. The real test is our ability to promote wise conservation and management of avian resources, to learn from the failures of our ancestors, and to separate -- to whatever degree possible -- man-induced change from natural fluctuations of geographic limits. From past lessons we can hope to learn how to sort problems that are influencing populations and how to maintain a balanced historical perspective and commonsense approach to management of current faunas. When choices are available most would favor management in the direction of primordial faunas at the expense of ones which are invasive and diverse. While this seems aesthetically desirable, it is the most difficult option and a route not likely to be often taken.

All this being said it is informative to note that even under the worst case (i.e., inclusion of a number of species in this report which should only marginally be considered as losses or range reductions of breeding fauna), the breeding birds of North Carolina remain for the most part resilient to human activity.

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Carolina Bird Club Web Site http://members.aol.com/cbirdclub

Spring 1998 North American Migration Count in South Carolina

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The 1998 Spring North American Migration Count in South Carolina was held on the second Saturday in May (9 May 1998). Some 155 observers in 74 parties found a grand total of 221 species and about 44,895 individual birds in South Carolina. Of these some 29 species were "exclusives," that is, found in only one county. The distribution of exclusives was as follows:

6 exclusives -- Charleston County

5 exclusives -- Spartanburg County

4 exclusives -- Jasper County, Georgetown County

2 exclusives -- Cherokee County, Lexington County

1 exclusive -- Chester County, Colleton County, Fairfield County, Greenville County, Orangeburg County, Richland County.

Participating Counties

Counts were held in twenty one of the forty six counties of the state (by geographic region, with county seat):

Coastal (C) and Outer Coastal Plain (OCP):

Beaufort (Beaufort)
Charleston (Charleston)
Colleton (Walterboro)
Georgetown (Georgetown)
Horry (Conway)
Jasper (Ridgeland)

Inner Coastal Plain (ICP):

Calhoun (St. Matthews)
Hampton (Hampton)
Orangeburg (Orangeburg)
Williamsburg (Kingstree)

Piedmont and Inner Coastal Plain (ICP) or Fall Line (FL) area:

Aiken (Aiken)
Lexington (Lexington)
Richland (Columbia)

Piedmont (P):

Cherokee (Gaffney)
Chester (Chester)
Fairfield (Winnsboro)
Saluda (Saluda)
Spartanburg (Spartanburg)
Union (Union)

Mountains (M) and Piedmont (P):

Greenville (Greenville) Oconee (Walhalla)

Aiken County, SC (AKN). (Piedmont and Inner Coastal Plain)

Total: 115 species; 2615 individuals.

6:30 AM to 7:30 PM. Temp. 64° to 85° F. Wind SE, 3 to 5 mph. AM clear; PM clear. Regular observers: 11 in field in 4 parties. Total regular party-hours: 40.5; total regular party-miles: 155.5; 33.25 hours and 18.5 miles on foot; 7.25 hours and 137 miles by car. Feeders: 1 observer, 1 feeding station, 1 hour watching feeders. Owling observers: 1 in 1 party. Owling party-hours: 1; owling party-miles: 1. Totals: 42.5 party-hours; 156.5 party-miles; 11 participants.

Coordinator: Anne Waters, 1621 Apple Valley Drive, Augusta, GA 30906. Participants: Laura Allen, Peter Bridge, Larry Eldridge, Christine Huzella, Sandra Johnson, Paul Koehler, Richard Lux, Daphne Parker, Anne Waters, Vernon Waters, Calvin Zippler.

As usual, counters in Aiken County turned in a solid count. A late Common Loon was notable, as were 3 Bald Eagles. There were numerous shorebirds for an inland county (9 species). Most notable was a nice count of 6 White-rumped Sandpipers.

Beaufort County, SC (BFRT). (Coastal and Outer Coastal Plain)

Total: 75 species; 947 individuals.

6:45 AM to 4:15 PM. Temp. 69° to 83° F. Wind SW, 10 to 15 mph. AM partly cloudy; PM partly cloudy. Regular observers: 1 in field in 1 party. Total regular party-hours: 10; total regular party-miles: 19; 8.5 hours and 8 miles on foot; 1.5 hours and 11 miles by car. Totals: 10 party-hours; 19 party-miles; 1 participant.

Coordinator: Patricia E. Metz, U.S. Fish & Wildlife Service, Parkway Business Center, Suite 10, 1000 Business Center Drive, Savannah, GA 31405.

Participants: Clem Dietz.

This single-observer count was limited to Pinckney Island NWR near Hilton Head. Few unusual birds were reported. Note that only 9 species of warbler were counted -- typical of spring migration along the South Carolina coast, but included in the warblers is a nice total of 6 Black-throated Green Warblers, true migrants, since this species does not nest this far south along the coast in South Carolina.

Calhoun County, SC (CLHN). (Inner Coastal Plain)

Total: 81 species; 3001 individuals.

7:15 AM to 4:00 PM. Regular observers: 5 in field in 2 parties. Total regular party-hours: 13; total regular party-miles: 143; 5 hours and 2 miles on foot; 8 hours and 141 miles by car. Totals: 13 party-hours; 143 party-miles; 5 participants.

Coordinator: Robin Carter, 4165 East Buchanan Drive, Columbia, SC 29206-2846.

Participants: Andrea Ceselski, Kathleen O'Grady, Jack Stewart, Lula Stewart, Bob Wood.

Notable in Calhoun County were a Merlin and a remarkable count of 2004 Bobolinks.

Charleston County, SC (CHSN). (Coastal and Outer Coastal Plain)

Total: 169 species; 10210 individuals.

5:00 AM to 8:00 PM. Temp. 58° to 78° F. Wind ESE, 5 to 10 mph. AM partly cloudy; PM partly cloudy. Regular observers: 24 in field in 11 parties. Total regular party-hours: 61.75; total regular party-miles: 286; 41.75 hours and 22 miles on foot; 9 hours and 247 miles by car; 4 hours and 1 mile by bike; Feeders: 2 observers, 2 feeding stations, 8 hours watching feeders. Stationary: 3 observers in 1 party for 1.5 hours. Owling observers: 5 in 5 parties; owling party-hours: 4; owling party-miles: 1. Totals: 75.25 party-hours; 287 party-miles; 24 participants.

Coordinator: Perry Nugent, 2260 Dallerton Circle, Charleston, SC 29414.

Participants: Van Atkins, Wynema Atkins, Mrs. M. Aldenderfer, Paul Aldenderfer, Mike Bernard, Sharon Brown, Danny Carlson, Jack Clarkson, Ed Conradi, George Crumley, Janice Fanning, Fernanda Hastie, Tom Hilton, Joan Hylander, Ann Kent, Perry Nugent, Irv Rosenfeldt, Ben Smith, Liz Smylie, Tony Speno, Charlie Walters, Craig Watson, Susan Watson, Betty Zimmerman.

As usual, Charleston County came in with an excellent count. Some of their good birds include a Merlin (late), 192 Whimbrels, 19 Common Terns, an Eastern Phoebe (late), a Hermit Thrush (late), and 4 Nelson's Sharp-tailed Sparrows (a bit late). Also of interest was the fact that no Black-throated Green Warblers were found, emphasizing the local decline of the coastal plain breeding population of this beautiful species.

Cherokee County, SC (CHKE). (Piedmont)

Total: 84 species; 1403 individuals.

8:00 AM to 10:30 PM. Temp. 60° to 79° F. Wind W to NW, 10 to 17 mph. AM partly cloudy; PM partly cloudy. Regular observers: 9 in field in 5 parties. Total regular party-hours: 24.75; total regular party-miles: 154.5; 11.5 hours and 9.5 miles on foot; 13.25 hours and 145 miles by car. Feeders: 7 observers, 5 feeding stations, 11 hours watching feeders. Owling observers: 2 in 2 parties; owling party-hours: 0.5; owling party-miles: 0. Totals: 36.25 party-hours; 154.5 party-miles; 13 participants.

Coordinator: Lyle Campbell, 126 Greengate Lane, Spartanburg, SC 29307. Participants: Lyle Campbell, Emily Childers, Travis Childers, Claude Cobb, Ken Garrett, Larry Jackson, Karla Lavender, Scott Lavender, Beverly Morrow, Alan Rose, April Rose, Carolyn Taylor, Les Young.

Unusual species reported from Cherokee County included an Anhinga (very rare), a Willow Flycatcher (rare), 2 Dark-eyed Juncos, 3 Purple Finches, and an Evening Grosbeak (all late).

Chester County, SC (CHSR). (Piedmont)

Total: 88 species; 1395 individuals.

4:45 AM to 5:45 PM. Temp. 65° to 78° F. AM partly cloudy; PM partly cloudy. Regular observers: 2 in field in 2 parties. Total regular party-hours: 14.5; total regular party-miles: 124; 10 hours and 9 miles on foot; 4.5 hours and 115 miles by car. Owling observers: 1 in 1 party; owling party-hours: 1.5; owling party-miles: 1. Totals: 16 party-hours; 125 party-miles; 2 participants.

Coordinator: Albert Conway, 1672 Deer Run Road, Catawba, SC 29704. Participants: Gail B. Ice, Irvin Pitts.

Probably the best bird reported from Chester County was a Gray-cheeked Thrush.

Colleton County, SC (CLTN). (Coastal and Outer Coastal Plain)

Total: 95 species; 678 individuals.

7:00 AM to 1:00 PM. Temp. 65° F to 86° F. Wind SE, 10 mph. Regular observers: 2 in field in 1 party. Total regular party-hours: 6.0; total regular party-miles: 51.5; 2 hours and 1.5 miles on foot; 4 hours and 50 miles by car. Stationary: 1 observer in 1 party for 2.5 hours. Totals: 8.5 party-hours; 51.5 party-miles; 3 participants.

Coordinator: Tim Kalbach, 3113 River Drive, Columbia, SC 29201.

Participants: Terry Huntsberger, Tim Kalbach, Andreas Kristensen.

Marsh species were notable for the Colleton County count, including good counts of 8 Least Bitterns, 3 Black Rails, and 15 King Rails.

Fairfield County, SC (FFLD). (Piedmont)

Total: 113 species; 1387 individuals.

5:00 AM to 10:00 PM. Temp. 56° to 84° F. Wind W, 0 to 7 mph. AM clear; PM partly cloudy. Regular observers: 3 in field in 1 to 3 parties. Total regular party-hours: 19.75; total regular party-miles: 273; 14.25 hours and 14 miles on foot; 3.5 hours and 259 miles by car. Owling observers: 1 in 1 party; owling party-hours: 2.5; owling party-miles: 0. Totals: 22.25 party-hours; 273 party-miles; 3 participants.

Coordinator: Donna Bailey, 176 Raven's Place, Winnsboro, SC 29180.

Participants: Buddy Bailey, Donna Bailey, Molly Bonnell.

Observers in Fairfield County counted 22 species of warbler, the most unusual of which was a Cerulean Warbler.

Georgetown County, SC (GTWN). (Coastal and Outer Coastal Plain)

Total: 115 species; 1682 individuals.

7:00 AM to 7:30 PM. Temp. 72° to 80° F. Wind SW, 5 to 10 mph. AM partly cloudy; PM partly cloudy. Regular observers: 8 in field in 4 parties. Total regular party-hours: 12.5; total regular party-miles: 154; 9 hours and 6 miles on foot; 3.5 hours and 148 miles by car. Totals: 12.5 party-hours; 154 party-miles; 8 participants.

Coordinator: Tonya Spires, P.O. Box 2167, Conway, SC 29526.

Participants: Wendy Allen, David Donmoyer, Steve Roff, Steve Smith, Tonya Spires, Ann Malys Wilson, Ann Marie Wilson, Lee Wilson.

Good birds in Georgetown County include an American Bittern, 5 Long-billed Dowitchers, and 3 Blue-headed Vireos. Sadly, no Common Ground-Dove was found in an area which a few years ago was a stronghold for that decreasing species.

Greenville County, SC (GRVL). (Mountains and Piedmont)

Total: 101 species; 2058 individuals.

6:45 AM to 6:30 PM. Temp. 58° to 80° F. Regular observers: 11 in field in 5 parties. Total regular party-hours: 34.25; total regular party-miles: 250.5; 25 hours and 15.5 miles on foot; 9.25 hours and 235 miles by car. Feeders: 1 observers, 1 feeding station, 1 hour watching feeders. Stationary: 2 observers, 2 stations, 1.75 stationary hours. Owling observers: 1 in 1 party; owling party-hours: 1; owling party-miles: 0. Totals: 38 party-hours; 250.5 party-miles; 11 participants.

Coordinator: Len Kopka, 4 Keynan Ct., Simpsonville, SC 29680.

Participants: Greg Cornwell, Jenne Davies, Preston Davies, Nell Gambrell, Steve Harris, Sam Hood, Sue Lessner, Eric McFalls, Jim Moore, Joyce Moore, Linda Sharp.

The counters in Greenville County turned in a solid effort. The most notable bird was probably the Pine Siskin.

Hampton County, SC (HMPD). (Inner Coastal Plain)

Total: 84 species; 2021 individuals.

6:10 AM to 7:55 PM. Temp. 67° to 90° F. Wind W, 0 to 3 mph. AM partly cloudy; PM partly cloudy Regular observers: 2 in field in 1 party. Total regular party-hours: 13.75; total regular party-miles: 149; 7 hours and 5 miles on foot; 6.75 hours and 144 miles by car. Totals: 13.75 party-hours; 149 party-miles; 2 participants.

Coordinator: Carroll Richard, P.O. Box 893, Hampton, SC 29924.

Participants: Bob Richard, Carroll Richard.

High counts and species of note in Hampton County include 1106 White Ibis, 7 Bald Eagles, and 1 Purple Gallinule. As usual Carroll Richard has turned in a good single-party count for this Deep South county.

Horry County, SC (HRRY). (Coastal and Outer Coastal Plain)

Total: 89 species, 970 individuals.

6:00 AM to 9:00 PM. Temp. 60° to 82° F. Wind S, 8 mph. AM partly cloudy; PM partly cloudy. Regular observers: 7 in field in 4 parties. Total regular party-hours: 17.25; total regular party-miles: 99.25; 10.5 hours and 2.25 miles on foot; 6.75 hours and 97 miles by car. Owling observers: 2 in 3 parties; owling party-hours: 3.25; owling party-miles: 33. Totals: 21 party-hours; 132.25 party-miles; 7 participants.

Coordinator: Tonya Spires, P.O. Box 2167, Conway, SC 29526.

Participants: David Donmoyer, Ernest Snavely, Tonya Spires, Phil Turner, Sharon Turner, Ann Malys Wilson, Lee Wilson.

Notable in Horry County were a Swallow-tailed Kite at the northern limits of its current breeding range, 8 Whip-poor-wills (versus just 3 Chuck-will's-widows), indicative of the continuing expansion of this species into the Coastal Plain, and a good migratory county of 2 Blue-headed Vireos. Compare this with the 3 Blue-headed Vireos seen in neighboring Georgetown County on the same day, indicating a real migratory push of this species in the Coastal Plain, where it is usually absent after the end of April, after the wintering individuals have left.

Jasper County, SC (JSPR). (Coastal and Outer Coastal Plain)

Total: 125 species; 3965 individuals.

7:00 AM to 8:00 PM. Temp. 56° to 85° F. Wind SW, 3 to 5 mph. AM clear; PM partly cloudy. Regular observers: 10 in field in 6 parties. Total regular party-hours: 28; total regular party-miles 82.5; 11.5 hours and 6.5 miles on foot; 12.5 hours and 60 miles by car; 4 hours and 16 miles by boat. Totals: 28 party-hours; 82.5 party-miles; 10 participants.

Coordinator: Patricia E. Metz, U.S. Fish & Wildlife Service, Parkway Business Center, Suite 10, 1000 Business Center Drive, Savannah, GA 31405. Participants: Tim Kalbach, Andreas Kristensen, Teri Leffek, Barry Lowes, Philomena Lowes, John Metz, Patricia Metz, Mark Musaus, Ray Porter, Richard Schultz, Jr.

As usual in Jasper County the Savannah spoil area yielded good shorebird counts, including 600 Lesser Yellowlegs, 500 Semipalmated Sandpipers, and 75 Stilt Sandpipers.

Lexington County, SC (LXTN). (Piedmont and Inner Coastal Plain)

Total: 97 species; 1207 individuals.

6:45 AM to 10:00 PM. Temp. 55° to 89° F. Wind SW, 0 to 5 mph. AM clear; PM clear. Regular observers: 9 in field in 5 parties. Total regular party-hours: 27.6; total regular party-miles: 63; 23.5 hours and 15 miles on foot; 4.1 hours and 48 miles by car. Feeders: 4 observers, 2 feeding stations, 2 hours watching feeders. Owling observers: 2 in 2 parties; owling party-hours: 2; owling party-miles: 0. Totals: 31.6 party-hours; 63 party-miles; 11 participants.

Coordinator: Molly Bonnell, 202 Cannon Trail Road, Lexington, SC 29073.

Participants: Donna Bailey, Brenda Lee Bass, Molly Bonnell, Barbara Darden, Jerry Griggs, Malia Griggs, Tom Hankins, Doris Slice, Lloyd Slice, Roger Smith, Mike Turner.

The most unusual species in Lexington County were all seen in the Saluda Shoals area, along the Saluda River: 1 Olive-sided Flycatcher, 3 Golden-winged Warblers, and 1 Cerulean Warbler.

Oconee County, SC (OCNE). (Mountains and Piedmont)

Total: 104 species; 2214 individuals.

6:37 AM to 7:00 PM. Temp. 61° to 81° F. Wind W, 0 to 10 mph. AM cloudy; PM clear. Regular observers: 10 in field in 4 parties. Total regular party-hours: 38.75; total regular party-miles: 431; 15.5 hours and 10.5 miles on foot; 23.25 hours and 420.5 miles by car. Totals: 38.75 party-hours; 420.5 party-miles; 10 participants.

Coordinator: Steve Wagner, 316 East Creswell, Greenwood, SC 29646.
Participants: Don Cox, Steve Cox, Vicki Cox, Lex Glover, Drew Lanham,
David Mizrahi, Carly Sheffield, Steve Sheffield, Sue Sheffield, Steve Wagner.

Participants in Oconee County turned in a solid county, but without any outstanding rare species or high counts. Despite the late date they did find 22 species of warblers.

Orangeburg County, SC (ORBG). (Inner Coastal Plain)

Total: 16 species; 83 individuals.

6:00 PM to 7:00 PM. Temp. 75° F. Regular observers: 2 in field in 1 party. Total regular party-hours: 1; total regular party-miles: 2.25; 0.25 hours and 0.25 miles on foot; 0.75 hours and 2 miles by car. Totals: 1 party-hour; 2.25 party-miles; 2 participants.

Coordinator: Tim Kalbach, 3113 River Drive, Columbia, SC 29201.

Participants: Tim Kalbach, Andreas Kristensen.

Tim and Andreas stopped off at the Orangeburg sod farms for an hour during a long birding day that reached from the Savannah National Wildlife Refuge to Columbia. Their best birds in Orangeburg County were a Sora and a Common Snipe.

CBC Rare Bird Alert (704) 332-BIRD

Richland County, SC (RCHL). (Piedmont and Inner Coastal Plain)

Total: 102 species; 1744 individuals.

6:00 AM to 9:00 PM. Temp. 65° to 83° F. Wind calm. AM clear; PM clear. Regular observers: 15 in field in 3 parties. Total regular party-hours: 15; total regular party-miles: 94; 8 hours and 5 miles on foot; 7 hours and 89 miles by car. Feeders: 1 observer, 1 feeding station, 1 hour watching feeders. Owling observers: 1 in 1 party; owling party-hours 1; owling party-miles: 33. Totals: 17 party-hours; 122 party-miles; 15 participants.

Coordinator: Robin Carter, 4165 East Buchanan Drive, Columbia, SC

29206-2846.

Participants: Fran Almond, Robin Carter, Steve Dennis, Caroline Eastman, John Foy, Gene Hall, Joyce Hall, Thomas Hartman, Heidi Hoerman, Leanne Jarrett, Sonny Jarrett, Tim Kalbach, Andreas Kristensen, Alice Parham, James Wilson, Carol Winberry.

Counters in Richland County turned up a Northern Pintail at Semmes Lake on Fort Jackson and a Merlin, hunting over flooded fields near the Heathwood Hall School.

Saluda County, SC (SLDA). (Piedmont)

Total: 82 species; 771 individuals.

8:20 AM to 4:40 PM. Temp. 60° to 80° F. Wind W, 0 to 5 mph. AM clear; PM clear. Regular observers: 1 in field in 1 party. Total regular party-hours: 8.33; total regular party-miles: 103; 8.33 hours and 103 miles by car. Totals: 8.33 party-hours; 103 party-miles; 1 participants.

Coordinator: Mike Turner, 1131 Shirley St., Columbia, SC 29205

Participants: Mike Turner.

Mike Turner's single party count in Saluda County turned up mostly expected species in unremarkable numbers. The best bird was probably a migratory Caspian Tern.

Spartanburg County, SC (SPTB). (Piedmont)

Total: 129 species; 4838 individuals.

5:30 AM to 10:30 PM. Temp. 60° to 79° F. Wind W to NW, 0 to 17 mph. AM partly cloudy; PM partly cloudy. Regular observers: 27 in field in 14 parties. Total regular party-hours: 85.75; total regular party-miles: 511.5; 46 hours and 36.5 miles on foot; 30.75 hours and 461 miles by car; 9 hours and 14 miles by boat. Feeders: 27 observers, 17 feeding stations, 48 hours watching feeders. Owling observers: 5 in 3 parties; owling party-hours: 4; owling party-miles 59. Totals: 137.75 party-hours; 520 party-miles; 54 participants.

Coordinator: Lyle Campbell, 126 Greengate Lane, Spartanburg, SC 29307.

Participants: Robbie Allen, Frankie Altman, John Barry, Susan Barry, Beth Bartel, Pat Burton, David Campbell, Lyle Campbell, Matthew Campbell, Sarah Campbell, Marion Clark, Aaron Cooper, G. R. Davis, Linda Deahl, Krista Donovan, Sharon Donovan, Stan Easley, Sam Floyd, Nell Foster, Roy Fowler, Pat Fowler, Bob Freeman, Sheena Freeman, Onoosh Gahaghan, Ron Gahaghan, Robin Gilman, Teresa Glenn, Ashley Green, Cathy Hall, Gladys Henry, J. B. Hines, Myra Hines, Flip Jones, Linda Kimbrell, Tiffany Kimbrell, Mickey Marotte, Ed Medlin, Gail Medlin, Jim Miller, Bill Moody, Marian Murph, Mary Ann Myers, Gill Newberry, I. B. Panell, Mary Potter, Bob Powell, Doug Raynor, Ginny Scott, Walton Scott, Tina Taylor, Dick Thorpe, Lois Thorpe, Gerald Thurmond, Debbie Woody.

Once again Lyle Campbell organized the best inland count in the state. Spartanburg County birders recorded a remarkable 129 species in the county, including a long list of rarities: 3 Bufflehead, 1 Bonaparte's Gull, 1 Barn owl, 1 Short-eared Owl, 1 Yellow-bellied Sapsucker, 3 Wilson's Warblers, and 4 Purple Finches.

Union County, SC (UNIN). (Piedmont)

Total: 68 species; 1080 individuals.

7:00 AM to 7:00 PM. Temp. 54° to 82° F. Wind calm. AM clear; PM partly cloudy. Regular observers: 2 in field in 1 party. Total regular party-hours: 12; total regular party-miles: 147; 0.5 hours and 1 mile on foot; 11.5 hours and 146 miles by car. Totals: 12 party-hours; 146 party-miles; 2 participants.

Coordinator: Evelyn D. Richbourg, 208 Spruce Street, Union, SC 29379. Participants: Sally Parker, Evelyn Richbourg.

This single party count did not find any unexpected species, but their count of 31 Prairie Warblers reminds us that much of Union County is regenerating pine clear cut habitat. Early successional species do well here.

Williamsburg County, SC (WMB). (Outer Coastal Plain).

Total: 81 species; 627 individuals.

6:30 AM to 11:30 PM. Temp. 65° to 78° F. Wind SW, 3 to 15 mph. Regular observers: 2 in 1 party. Total regular party-hours: 6; total regular party-miles: 17.5; 5 hours and 2.5 miles on foot; 1 hour and 15 miles by car. Owling observers: 1 in 1 party; owling party-hours 3; owling party-miles 0. Totals: 9 party-hours; 17.5 party-miles; 2 participants.

Coordinator: John Snow, Route 1, Box 192, Hemingway, SC 29554.

Participants: John Snow, Paula Sutton.

No unusual species or remarkable high numbers were recorded in Williamsburg County.

Summary of Spring 1998 NAMC in South Carolina

State-wide Total: 221 species, 44,895 individuals.

Observers: 155 in 74 parties; Party-hours: 288 hours on foot, 178.43 hours by car, 13 hours by boat, 4 hours by bicycle, 7 hours by golf cart. Party-miles: 190.5 miles on foot, 3073.5 miles by car, 30 miles by boat, 1 mile by bicycle, 16 miles by golf cart. Feeder watch: 72 hours by 43 watchers at 29 feeding stations. Stationary: 5.75 hours by 6 observers at 4 stations. Owling: 23.75 hours and 128 miles by 23 observers in 19 parties.

CAROLINABIRDS

Carolinabirds is an Internet e-mail discussion group about birds and birding in the Carolinas. Subscribers frequently post sightings to it similar to those found in Briefs for the Files, but unusual behavior receives more attention. Subscriptions are free. To subscribe, address an e-mail message to <majordomo@duke.edu>. Don't fill in the subject line. As your message, simply put, "subscribe carolinabirds" (without the quotes). You will receive a confirmation and more information shortly. Submissions for Briefs for the Files should be sent directly to Ricky Davis.

Spring 1998 North American Migration Count in South Carolina

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General Field Notes

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Fourth Northern Shrike Record from North Carolina

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While involved in the annual Christmas Bird Count at the Pea Island National Wildlife Refuge, Dare County, NC, December 29, 1994, I was asked by Carroll Richard, a non-participating birder, to identify an unfamiliar passerine species she had located. She pointed to a 30 ft. black cherry (*Prunus serotina*), approximately 30 yards distance, with an evergreen vine (*Smilax rotundifolia*) trailing upwards approximately 25 ft. The tree was leafless, but the mass of evergreen catbrier leaves near the top made locating the bird difficult.

There was 100% cloud cover and a steady NW wind, gusting to 25 mph; the temperature was in the low 40's. It was approximately 9:00~A.M.

Upon locating the bird, it was immediately obvious that it was a shrike, but very likely not a Loggerhead Shrike (*Lanius ludovicianus*). The hallmark large head and longish tail were clearly apparent. The bird was about the size of an American Robin (*Turdus migratorius*). Except for very dark wings and tail, one was given the impression of a light buff or tawny caste to the bird, especially the head, back and underparts. The bill was heavy and generally dark in color. Within 30 seconds, it flew west, bucking the wind, and disappeared behind the heavily-vegetated levee that separates North Pond from the Salt Flats. The undulating, woodpecker-like flight was noted.

My count partner, Ken Knapp, was signaled to help us relocate the animal. Approximately 30 minutes later, it reappeared, perched atop an adjacent thicket of wax myrtle (*Myrica cerifera*), approximately 50 yards from us. The bird was

facing into the wind. Our location afforded a profile view. Carefully examining it with a 30-power Nikon scope, the light buffy appearance was apparent to us and the other observers. The following field marks on the perched bird were also noted:

- 1. The wings and tail were dark with definite light-colored areas in the folded wing;
- 2. There was no facial mask, only an auricular patch, clearly darker than any other feathered area on the head. In the overcast light, no distinct color was discernable in the auricular patch;
- 3. The base of the lower mandible was lighter than the rest of the lower mandible; and
 - 4. Very fine, dark horizontal bars were evident on the underparts.

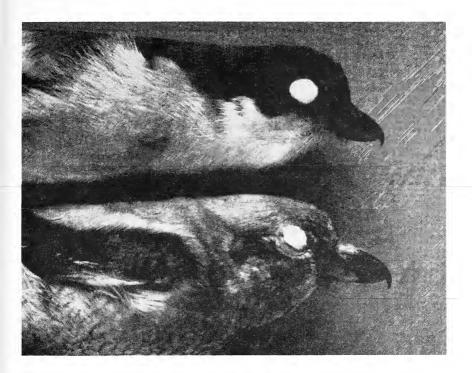
The shrike was in full view for 3-4 minutes. In addition to the author, the bird was carefully observed by Richard, Knapp, and Gordon Gridley. No vocalizations were noted by any of the observers. Later in the morning, Knapp encountered it again, briefly, approximately 300 yards to the east, along the same elevated levee. Observations at all three locations satisfied us that this was an immature Northern Shrike (*L. excubitor*).

Historically, there are few records for this species in North Carolina. Ironically, the oldest record, as noted in Pearson *et al.* (1942), was a specimen collected on Pea Island, December 9, 1909. Additionally, there are two records (no published details available) of Northern Shrike reported on Christmas Bird Counts near the Nathans Creek Community, Ashe County, in 1963 and 1964.

Not surprisingly, there are several more records from Virginia (Kain 1987), the distribution being fairly even from east to west: Coastal Plain - 3, Piedmont - 2, Mountains and Valleys - 2. Dates of occurrence in Virginia ranged from 24 November to 6 March. Only 1 record exists for the appearance of Northern Shrike in Tennessee (Robinson 1990). An immature bird was collected in Bristol, 10 November, 1964. There are no records for South Carolina or Georgia.

Discussion

With North Carolina probably the southern limit of the range of the Northern Shrike in eastern North America, few local observers would be expected to have had field experience with this shrike species. The accompanying photograph is of two shrike studyskins: (a) a Loggerhead Shrike from Wake County, N.C., and (b) the aforementioned specimen of Northern Shrike (FM 163,444) collected at Pea Island, Dare County, N.C., in 1909. Some of the characters we noted in the field are demonstrable in this photograph:



- 1. The vermiculations (horizontal barring) on the underparts of the Northern Shrike specimen;
- 2. Lack of well-defined facial mask on the Northern Shrike specimen;
- 3. Lighter-colored basal aspect of the Northern Shrike lower mandible; and
- 4. The longer, more prominently hooked beak on the Northern Shrike.

Acknowledgments

I thank John Gerwin, Bird Collection Manager, N.C. Museum of Natural Sciences, for arranging for the loan of the Northern Shrike study skin from the Field Museum of Chicago.

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BRIEFS FOR THE FILES

Ricky Davis 608 Smallwood Drive Rocky Mount, NC 27804 RJDNC@aol.com

(All Dates Winter 1998 - 1999)

Briefs for the Files is a seasonal collection of uncommon-to-rare or unusual North and South Carolina bird sightings and events which do not necessarily require a more detailed field note or article. Reports of your sightings are due the 20th of the month after the end of the previous season.

Winter: December 1 - February 28, due March 20

Spring: March 1 - May 31, due June 20 Summer: June 1 - July 31, due August 20

Fall: August 1 - November 30, due December 20

Reports can be submitted in any format, but I prefer that you type them and list the sightings according to the birds in checklist order (not according to dates or locations). If you submit your report to me through e-mail, please type your report directly into the message or copy it from a word processing program directly into the message. You may also attach your file to the e-mail, but if you do, please let me know the program used and also send a second version saved as a text (txt.) file.

Suitable reports for the Briefs include any sightings you feel are unusual, rare, noteworthy, or just plain interesting to you in any way! It is my responsibility to decide which reports merit inclusion in the Briefs.

Please be sure to include details of any rare or hard-to-identify birds.

I rely in part on sightings reported in Carolinabirds. Please don't, however, rely on me to pick up your sightings from Carolinabirds. Instead, please also send your sightings directly to me as described above.

If I feel that your sighting warrants a Field Note, I will contact either you or the appropriate state Field Notes editor. You may, of course, submit your Field Note directly to the editor without going through me.

PACIFIC LOON: Figure Eight Island, New Hanover County, NC, continues to be the only regular site for the species in the Carolinas. Another one was there Dec. 20, as noted by Derb Carter. Much more interesting was one found

in Croatan Sound near the shore of Roanoke Island, Dec. 12 (David Disher et al.).

HORNED GREBE: An excellent inland count of 220 was had at Jordan Lake, NC, Feb. 27 (Ricky Davis, Betty Davis, Sherry Porter.)

RED-NECKED GREBE: Reports of this species included three at Huntington Beach State Park, SC, Jan. 10 (Tim Kalbach), two in Pamlico Sound near the Swan Quarter N.W.R., NC, Jan. 30 (Haven Wiley *et al.*), and singles at Wilmington, NC, Jan. 2 (Sam Cooper) and Kitty Hawk, NC, Jan. 30 (Ricky Davis).

EARED GREBE: This species was once again found in the Carolinas this winter. An impressive count of 12 was had at the Savannah Spoil Site, Jasper County, SC, Dec. 10 (Steve Calver), with ten still present Feb. 9 (Calver). Other reports involved two at the salt pond at Cape Hatteras, NC, all winter (m. ob), two in Pamlico Sound near Buxton, NC, Feb. 16 (*fide* Pat Moore), one on the Savannah River Site, SC, CBC Dec. 21 (Anne Waters), and one at Jordan Lake, NC, from late December until Feb. 27 (Ricky Davis).

CORY'S SHEARWATER: Of interest was a Cory's specimen found on the beach at Huntington Beach State Park, SC, on the late date of Dec. 10 (Jack Peachey).

GREATER SHEARWATER: One was seen from shore at Cape Hatteras, NC, Jan. 16 (Eloise Potter). Winter reports of this species are very rare, and being close to shore made it all the more unusual.

SOOTY SHEARWATER: One was found off of Oregon Inlet, NC, Jan. 30 (Brian Patteson *et al.*). Although extremely rare in winter, this was the third one reported in North Carolina waters the last couple of years!

MANX SHEARWATER: This regular winter visitor was found twice with 12 off Oregon Inlet, NC, Jan. 30 and seven off Hatteras, NC, Feb. 13 (Brian Patteson *et al.*).

AMERICAN WHITE PELICAN: One was in the Charleston, SC, area Dec. 18 (*fide* Dennis Forsythe) and Jan. 31 (Mike Bernard), for the only report.

BROWN PELICAN: An impressive winter count of 5,000 in the Hatteras Inlet, NC, area Dec. 30 (Harry LeGrand) was no doubt due to the very mild fall. **GREAT CORMORANT:** One was slightly inland on the New Bern, NC, CBC Dec. 21 (Wade Fuller), for about the third year in a row!

ANHINGA: Very rare in winter was one inland on the Raven Rock State Park, NC, CBC Dec. 19 (Scott Hartley). Also several were found on the New Bern, NC, CBC Dec. 21 (*fide* Wade Fuller).

MAGNIFICENT FRIGATEBIRD: Extremely unusual were two winter reports! A female was seen at New River Inlet, NC, Dec. 3 (Betty Grady) and a male was inland (!) at Goldsboro, NC, Dec. 9 (Mike Schultz). These were

only the 4th and 5th winter reports for the state. Could they have been the same individual?

AMERICAN BITTERN: Always noteworthy inland in winter, one was at the upper end of L. Marion, Calhoun County, SC, Jan. 9 (Mike Turner), and another or the same individual was at Santee N.W.R., SC, Jan. 16 (Robin Carter and Caroline Eastman).

LEAST BITTERN: One was very rare and unexpected at Buxton, NC, Jan. 4 (Marcia Lyons and Eric Fulcher), although the Cape Hatteras area has held winter Leasts before.

GREAT EGRET: Rare inland winter sightings included an impressive total of 14 on the Durham, NC, CBC Dec. 20 (*fide* Will Cook), one at Woodlake, Moore County, NC, Dec. 20 (*fide* Scott Hartley), and one at Greenview Pond, Wake County, NC, throughout January (Ricky Davis, Josh Rose, sev. ob.).

REDDISH EGRET: One was late at Huntington Beach State Park, SC, Dec. 5-6 (Jack Peachey and Gary Phillips, Robin Carter and Caroline Eastman). Much more impressive were the three at Ft. Fisher, NC, Jan. 3 (John Fussell, Jim O'Donnell, Wayne Ivosevic), providing a first definite winter report for the state.

CATTLE EGRET: North Carolina had more lingering Cattle Egrets this winter than normal. Eight were in the New Bern area throughout December (Bob Holmes), 10+ were on the L. Mattamuskeet CBC Dec. 27 (*fide* Allen Bryan), and 30 were at Alligator River N.W.R. Dec. 28 (Ricky Davis).

GREEN HERON: Very rare inland in winter, one was found on the York/Rock Hill, SC, CBC Dec. 19 (*fide* Bill Hilton, Jr.).

YELLOW-CROWNED NIGHT-HERON: An immature at Ft. Fisher, NC, Dec. 12 (Barbara Gearhart) was very late. This species is very rarely found in the Carolinas during winter.

WHITE IBIS: Inland winter reports of note included 38 on the L. Mattamuskeet, NC, CBC Dec 27 (Ricky Davis) and 21 on the Santee N.W.R., SC, CBC Jan. 2 (*fide* Lex Glover).

GLOSSY IBIS: Very rare in winter, two were present north of Beaufort, NC, Jan. 4 until mid-month (Rich Boyd, John Fussell, Susan Arrington), and two (Plegadis sp.?) were on the Cape Hatteras, NC, CBC Dec. 30 (fide Harry LeGrand).

WOOD STORK: One was on the Litchfield-Pawleys Island, SC, CBC Dec. 30 (Lex Glover), providing a count first and one of the very few winter reports for the upper coastal area.

BLACK-BELLIED WHISTLING-DUCK: One was found at Wanchese, NC, on the Bodie-Pea Islands CBC Dec. 29 (Will Cook, Norm Budnitz, Ricky Davis). The bird was present through January and was seen by many observers, causing much debate about its apparent wildness. Diligent searching finally

brought to light that a nearby hunt club had lost several of these ducks during the year (Lynn Barber). With the documented increases in the Florida population and the increasing number of extralimital reports from other eastern states, it seems only a matter of time before a truly wild wandering bird will appear in North Carolina.

GREATER WHITE-FRONTED GOOSE: This species was present in higher than normal numbers this winter. A group of four was found at Santee N.W.R., SC, Dec. 5 (Van Atkins), and up to six were seen (*fide* Lex Glover) there by Jan. 2. These birds remained until at least February (m. ob.). Another group of six was seen just east of L. Mattamuskeet, NC, Dec. 13 (David and Susan Disher). Elsewhere, two from the fall season at the salt pond at Cape Hatteras, NC, were present until at least Dec. 7 (m. ob.); one was on the Raleigh, NC, CBC Dec. 19 (*fide* Will Cook); and one was on the Wilmington, NC, CBC Jan. 2 (*fide* Sam Cooper).

SNOW GOOSE: Reports away from the usual North Carolina Outer Banks areas included eight in Transylvania County, NC, Jan. 19 (Dick Blee), five in Wayne County, NC, Dec. 10-24 (Eric Dean), two near St. Andrews College, Scotland County, NC, Dec. 7-19 (Barbara Gearhart), one at Bishopville, Lee County, SC, Feb. 20 (Robin Carter *et al.*), and two in Beaufort County, SC, Dec. 5-6 (Lex Glover and David Dobson).

ROSS'S GOOSE: This species was present in the Carolinas in record numbers this year. The best counts included nine on the L. Mattamuskeet, NC, CBC Dec. 27 (fide Allen Bryan) and four near Pontiac, Richland County, SC, Jan. 5 through the end of the period (Lex Glover et al., m. ob.). Other reports were of two on the Bodie-Pea Islands, NC, CBC Dec. 29 (fide Paul Sykes), two at Pungo N.W.R., NC, Jan. 30 (Haven Wiley et al.), and one at Santee N.W.R., SC, Jan. 1-15 (Robin Carter, Lex Glover et al., Stephen Harris, sev. ob.).

CANADA GOOSE: A very small (half the size of a nearby Snow Goose) Canada Goose was seen at Pungo N.W.R., NC, Jan. 30 (Haven Wiley *et al.*) and was probably of the *hutchinsii* race, which is rarely reported in the Carolinas.

TUNDRA SWAN: This species continues to winter farther inland in northeastern North Carolina each year, as evidenced by the 2,150 found in the Occoneechee Neck area of Northampton County Jan. 3 (Merrill Lynch *et al.*). Other out-of-place Tundras included two at Greenview Pond, Wake County, NC, Jan. 10 - Feb. 27 (Ricky Davis, Josh Rose, sev. ob.), one at Woodlake, Moore County, NC, Feb. 13 (Dick Burk *et al.*), two at Caswell, NC, Jan. 3 (Harry LeGrand), and one at Sunset Beach, NC, Jan. 20 (Mary McDavit).

EURASIAN WIGEON: Single males were at L. Mattamuskeet, NC, Dec. 27 (Ricky Davis and Derb Carter), Bodie Island Lighthouse pond, NC, Jan. 1 (Brad Carlson *et al.*), and North Pond, Pea Island N.W.R., NC, Jan. 30 through

February (John Fussell *et al.*, m. ob.). Also, from one to two males were at Greenfield Lake, Wilmington, NC, Jan. 31 through February (Mary Bridges, *fide* Eric Dean, sev. ob.).

MOTTLED DUCK: This introduced species seems to be increasing along the South Carolina coast. The count of 11 on the Litchfield-Pawleys Island CBC Dec. 30 (fide Jack Peachey) was one of the highest yet. Observers in coastal North Carolina should be on the lookout for this species in the near future.

BLUE-WINGED TEAL: One in northern Forsyth County, NC, Jan. 2 (*fide* Ramona Snavely) provided a rare winter occurrence for that inland location.

GREEN-WINGED TEAL: An individual of the *Eurasian* race was found at Greenview Pond, Wake County, NC, Jan. 10 (Ricky Davis). Reports of this race in the Carolinas are always noteworthy, and inland sightings are extremely rare.

REDHEAD: One was locally rare on the New River, Alleghany County, NC, Jan. 23, as noted by Betty Scott, *fide* James Coman III.

GREATER SCAUP: An excellent total of 94 was found between two areas on L. Hickory, NC, Feb. 28 (Dwayne and Lori Martin).

COMMON EIDER: The only report was of three flying south along the beach at Southern Shores, NC, Jan. 30 (Ricky Davis).

HARLEQUIN DUCK: Only one was reported this winter, that being a female at the jetty at Wrightsville Beach, NC, Jan. 2, as noted by Ricky Davis.

SURF SCOTER: Inland reports are always noteworthy. Thus of interest were one at Falls Lake, NC, Jan. 2 (Chris Eley and Gordon Brown), one on the Winston-Salem, NC, CBC Jan. 2-4 (C. Royce Hough), and one in eastern Richland County, SC, Jan. 10 (Robin Carter and Caroline Eastman).

OLDSQUAW: Interesting inland reports included one at Ninety Six, Greenwood County, SC, Jan. 24 (Steve Wagner), one at L. Oliphant, Chester County, SC, Jan. 10 (Mike Turner), and an impressive group of nine at Jordan Lake, NC, Jan. 10 (Ricky Davis, Will Cook). Also, locally unusual coastal sightings were singles at Huntington Beach State Park, SC, Jan. 10 (Tim Kalbach) and Sunset Beach, NC, Jan. 20 (Mary McDavit).

COMMON MERGANSER: Reports of this species included 15-20 on Lake Phelps, NC, Jan. 31 (Wade Fuller *et al.*), six on the Falls Lake, NC, CBC Jan. 2 (*fide* Will Cook), three at Jordan Lake, NC, in early January (*fide* Barbara Roth), and one at Roanoke Rapids Lake, NC, Jan. 3 (Merrill Lynch).

RUDDY DUCK: An excellent total was had at Roanoke Rapids Lake, NC, when 1,302 were counted Jan. 3 (Merrill Lynch). This lake has Hydrilla in the upper end, and the resulting benefit to waterfowl is quite obvious.

OSPREY: Inland lingering Ospreys included singles on the Raven Rock State Park, NC, CBC Dec. 19 (Mary Stevens), the York/Rock Hill, SC, CBC Dec. 19 (fide Bill Hilton, Jr.), and the Falls Lake, NC, CBC Jan. 2 (fide Will Cook).

ROUGH-LEGGED HAWK: A light-phase individual caused much excitement at Alligator River N.W.R., NC, Jan. 19 (Simon Thompson *et al.*) until at least mid-February (m. ob.).

GOLDEN EAGLE: There were more reports than normal this winter. Immatures at Pungo N.W.R., NC, Dec. 12 (Gordon Brown) and L. Mattamuskeet, NC, Feb. 6 (Brad Carlson, Kelly Davis, *et al.*) were not terribly unexpected in those areas. Much more unusual were an immature near Dover, Craven County, NC, Feb. 22 (Larry Crawford) and an adult at Savannah N.W.R., SC, Jan. 2 (Robin Carter and Caroline Eastman). Also, an adult was seen in the Fayetteville-Ft. Bragg, NC, area in early February by two different observers at two different locations (*fide* Hal Broadfoot). Were two different birds involved?

MERLIN: Inland reports this winter included singles on the Raleigh, NC, CBC Dec. 19 (fide Will Cook), on the Southern Pines, NC, CBC Dec. 20 (fide Scott Hartley), on the Santee N.W.R., SC CBC Jan. 2 (fide Lex Glover), on the Roanoke Rapids, NC, CBC Jan. 3 (Merrill and Ida Lynch), at Lattimore, Cleveland County, NC, Jan. 2 (Simon Thompson et al.), and in Cumberland County, NC, Jan. 12 (Phil Crutchfield).

PURPLE GALLINULE: Very rare and unexpected was an immature found along a highway ditch at Nags Head, NC, Dec. 29-30 (Charles Gambill, sev. ob.). The bird was observed to be quite weak on the second day and no doubt did not survive the cold temperatures. Another rare winter sighting involved an adult at the Santee W.M.A., Georgetown County, SC, Feb. 21 (Dennis Forsythe *et al.*).

SANDHILL CRANE: Only one report was received, that of one seen in a grassy field in Marion County, SC, Feb. 27 (Mike Barnette, *fide* Jack Peachey). **WILSON'S PLOVER:** This species is very rare and local as winter residents in the Carolinas. This season two were at Bird Shoal, Beaufort, NC, Dec. 12-20 (John Fussell, Sam Cooper, Mike Tove, *et al.*), two were at Ft. Fisher, New Hanover County, NC, Jan. 3 (John Fussell *et al.*), and one was on the Litchfield-Pawleys Island, SC, CBC Dec. 30 (Lex Glover).

KILLDEER: A very late breeding record for this species was provided by a bird sitting on a nest with four eggs in North Charleston, SC, Dec. 5-14 (Bob Chinn). The nest was deserted on the 16th, and the eggs were collected by Will Post on the 17th. This is easily one of the latest documented nestings in the Carolinas.

AMERICAN AVOCET: One at Ft. Fisher, NC, Jan. 3 (John Fussell *et al.*) was locally rare and unexpected, especially during the winter season.

LESSER YELLOWLEGS: Quite rare inland in winter, three were good finds on the Durham, NC, CBC Dec. 20 (*fide* Will Cook).

SPOTTED SANDPIPER: Winter reports included one at Morehead City, NC, Dec. 20 (Ricky Davis) and one on the Litchfield-Pawleys Island, SC, CBC Dec. 30 (Phil Turner).

LONG-BILLED CURLEW: One was a surprise in a large lawn at Wrightsville Beach, NC, Jan. 2 (John Brunjes *et al.*), providing the only report this season.

WESTERN SANDPIPER: This species is seldom found inland in winter, thus of note were two in Cumberland County, NC, Jan. 21 (Phil Crutchfield).

LEAST SANDPIPER: Excellent inland counts included 37 on the Chapel Hill, NC, CBC Dec. 27 and 35 on the Durham, NC, CBC Dec. 20 (*fide* Will Cook). Also, 16 were near Laurinburg, NC, Dec. 15 (Barbara Gearhart), and 13 were found in Cumberland County, NC, Dec. 27 (Hal Broadfoot).

STILT SANDPIPER: The wintering population at the Savannah Spoil Site, Jasper County, SC, peaked at 13 birds on February 9, as noted by Steve Calver. GREAT SKUA: Three were found off Hatteras, NC, Feb. 13 (Brian Patteson *et al.*) for the only report this winter.

LAUGHING GULL: Laughing Gulls lingered in higher than normal numbers this year. One was far inland on the Falls Lake, NC, CBC Jan. 2 (fide Will Cook), providing a very rare Christmas count record for that locality. A good total of 108 were found on the New Bern, NC, CBC Dec. 21 (Bob Holmes). And defying explanation was the flock of 540 found with Ring-billeds and Herrings in a field southeast of Scotland Neck, Halifax County, NC, Dec. 12 (Ricky Davis). This total is probably a record count for such an inland location during the winter.

FRANKLIN'S GULL: An immature was videotaped on Lake Norman, NC, Dec. 20 (David Wright *et al.*), constituting a very rare winter record for an inland area. This bird was no doubt part of the unprecedented fall invasion of this species into much of the east.

BLACK-HEADED GULL: Only two reports, an adult was at Pine Knoll Shores, NC, Dec. 10, and another or the same adult was nearby at the Morehead City, NC, Wastewater Treatment Plant Jan. 17-22 (John Fussell).

CALIFORNIA GULL: This species has become annual at Cape Hatteras, NC. This year up to two adults were present with the first one being found Dec. 26 (Eric Dean), two were seen during January (sev. ob.), and the last one was reported Feb. 14 (Russ and Patricia Tyndall).

HERRING GULL: Rare in the mountains, three immatures were found in Calvert, Transylvania County, NC, Jan. 23-24 (Norma and Bill Siebenheller, *et al.*), providing a first county record.

THAYER'S GULL: One adult was present at Cape Hatteras, NC, this winter Dec. 30 until at least Jan. 30 (*fide* Harry LeGrand, sev. ob.).

ICELAND GULL: Up to two frequented the Cape Hatteras, NC, area this winter (m. ob.), as usual. Much more unexpected was the one found on Baldhead Island on the Southport, NC, CBC Jan. 3 (Derb Carter).

LESSER BLACK-BACKED GULL: Interesting inland reports included adults at Falls Lake, NC, Jan. 2 (Will Cook) and Jan. 30 (Josh Rose), an immature there Feb. 7 (Ricky Davis), one at Greenville, NC, Jan. 3 (John Wright *et al.*), and two at the Craven County, NC, landfill Jan. 2 (Wade Fuller and Bob Holmes).

GLAUCOUS GULL: Apart from the usual couple of birds in the Cape Hatteras, NC, area, single immatures were at Hatteras Inlet, NC, Feb. 13 (Harry Armistead) and Wanchese, NC, Jan. 30 (Mike Tove *et al.*)

GREAT BLACK-BACKED GULL: The Raleigh, NC, area continues to host increasing numbers of this species each winter. This year 13 were on the Falls Lake Christmas Count Jan. 2 (*fide* Will Cook).

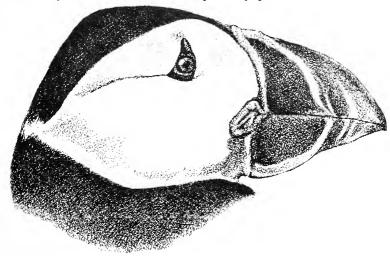
GULL-BILLED TERN: A tern in basic plumage fitting the description of a Gull-billed was at Huntington Beach State Park, SC, Feb. 13 (Jack Peachey). This would be a record early date for the species in the Carolinas.

BRIDLED TERN: A complete surprise was one found dead at the base of a building on Pawleys Island, SC, Jan. 18 (Lex Glover and Chris Newkirk). This is possibly the first true winter season report for South Carolina.

BLACK SKIMMER: One was locally unusual and slightly inland at L. Mattamuskeet, NC, Dec. 28 (Wayne Irvin, Ricky Davis, *et al.*). And the presence of two in a flooded field near the Cherry Hospital, Wayne County, NC, Dec. 24 (Eric Dean) is totally unexplainable for an inland winter report. **RAZORBILL:** The only Razorbills found this year were two seen flying south

RAZORBILL: The only Razorbills found this year were two seen flying south past the beach at Corolla, NC, Jan. 30 (Ricky Davis).

ATLANTIC PUFFIN: North Carolina's third record was of two seen off of Oregon Inlet Jan. 30 (Brian Patteson *et al.*) This species no doubt winters in our waters most years, but the numbers are probably quite low.



WHITE-WINGED DOVE: This winter's reports included singles on the Litchfield-Pawleys Island, SC, CBC Dec. 30 (Lex Glover), at Folly Beach, SC, Jan. 22 (Lex Glover), at a Columbia, SC, feeder Dec. 20 (Jere Eggleston), and up to three in the Beaufort, NC, area Dec. 20 (Gene Howe).

COMMON GROUND-DOVE: Up to two were seen in eastern Williamsburg County, SC, Jan. 31 and Feb. 6 (Jack Peachey, Robin Carter and Caroline Eastman), possibly representing a new inland location for the species. Also one found at Ft. Fisher on the Southport, NC, CBC Jan. 3 (Ricky Davis) showed that there are still some in that state.

NORTHERN SAW-WHET OWL: The only reports received were of one found dead at Beaufort, NC, in late November (*fide* John Fussell) and one observed in the Sherwood Forest area of Transylvania County, NC, Jan. 11 (*fide* Norma Siebenheller).

CHUCK-WILL'S-WIDOW: One flushed near New Bern, NC, Dec. 24 (Bob Holmes) provided a rare sighting of a species which no doubt lingers on into winter in some years.

HUMMINGBIRDS: Reports of wintering *Archilochus* and *Selasphorus* types continue to increase in the Carolinas. This season there were at least 75 *Archilochus* and 25 *Selasphorus* hummers reported in the two states. The Carteret County, NC, area alone had at least 50 birds (John Fussell). And as stated before, the distribution of these birds shows a definite coastal zone for the Ruby-throated types, while the Rufous types seem to be spread out equally between coastal and inland locations.

WESTERN KINGBIRD: Late individuals were at the Cape Hatteras, NC, campground Dec. 7 (*fide* Ricky Davis) and at Ft. Fisher, NC, Dec. 9 (Kendrick Weeks).

WHITE-EYED VIREO: Quite rare far inland in winter were singles on the Durham, NC, CBC Dec. 20 (Owen McConnell and James Dykes) and the Rocky River, SC, CBC Dec. 22 (*fide* Steve Patterson).

YELLOW-THROATED VIREO: One was a complete surprise on the Durham, NC, CBC Dec. 20 (Owen McConnell and James Dykes). This species should not be in the Carolinas during winter, and this sighting provided a first report for the Christmas Counts.

BARN SWALLOW: Noteworthy late individuals included one at Figure Eight Island, NC, Dec. 20 (Derb Carter) and one at Huntington Beach State Park, SC, Dec. 28 (Andrea Ceselski).

SEDGE WREN: Locally rare in winter, a Sedge Wren was a good find at Mason Farm, Chapel Hill, NC, Feb. 27 (Haven Wiley).

AMERICAN ROBIN: An extremely early nesting attempt was observed in Charlotte, NC, where a pair built a nest the last week of January and laid three

eggs by early February! The female incubated the eggs for three weeks before abandoning them (fide Bill Hilton, Jr.).

ORANGE-CROWNED WARBLER: Inland winter sightings away from the usual coastal areas included two on the Raven Rock State Park, NC, CBC Dec. 19 (Paul Hart, Hal Broadfoot, Susan Pulsipher), one on the Raleigh, NC, CBC Dec. 19 (*fide* Will Cook), one on the Rocky River, SC, CBC Dec. 22 (Steve Wagner), one north of Fayetteville, NC, Jan. 6 (Phil Crutchfield), and one at a feeder in Wake Forest, NC, in late February for several weeks (*fide* Walt Conway).

NASHVILLE WARBLER: One at Lake Mattamuskeet, NC, Dec. 27 (Allen Bryan) and again Jan. 2 (Brad Carlson *et al.*) provided a rare but not unexpected winter record.

NORTHERN PARULA: Quite rare in winter, this species was found at least four times in the Carolinas. Singles were at Simpsonville, SC, Dec. 9 (Pete Worthington), Charlotte, NC, Dec. 25 (David and Susan Disher, Paul Powers), Lake Mattamuskeet, NC, Dec. 27 (Allen Bryan), and in Georgetown County, SC, Feb. 21 (Dennis Forsythe *et al.*).

YELLOW WARBLER: Very rare in winter were one near Beaufort, NC, Dec. 13 & 20 (John Fussell and Allen Bryan) and at Lake Mattamuskeet, NC, Dec. 27 (Allen Bryan). Interestingly, the Beaufort bird was in the exact same spot where one was found during the winter of 1992!

BLACK-THROATED BLUE WARBLER: A male was found at Weymouth Woods near Southern Pines, NC, Dec. 2 (Dick Burk), providing a rare winter season report. The bird was most likely a very late fall migrant and not wintering.

YELLOW-RUMPED WARBLER: An individual of the *Audubon's* race was well-described from Waities Island, Horry County, SC, Jan. 8 (Jack Peachey and Gary Phillips). This western form has been reported almost annually in the Carolinas lately. Are they increasing in the east, or are more people looking for them?

BLACK-THROATED GREEN WARBLER: One found at Lake Mattamuskeet, NC, Jan. 31 (Kent Fiala, Susan Mitchell, Peggy Franklin) was seen well but briefly. Winter reports of this species are practically unheard of in the Carolinas; Townsend's Warbler is probably just as possible!

YELLOW-THROATED WARBLER: One was quite rare on the L. Mattamuskeet, NC, CBC Dec. 27 (fide Allen Bryan).

PRAIRIE WARBLER: This species winters in very small numbers along the immediate coast every year. Rare inland sightings included one in Winston-Salem, NC, Dec. 12 (Doug DeNeve and Pam Burke), two at New Bern, NC, Dec. 21 (Larry Crawford and John Wright), and one near Raleigh, NC, Dec. 28 (Jeff Beane).

BLACK-AND-WHITE WARBLER: Most winter seasons produce a few reports of this species. This year was exceptional in the number of reports and individuals found. There were at least 7 reports from the Carolinas and several were of more than one individual. The best count was the amazing total of four on the Jordan Lake, NC, CBC Jan. 3 (*fide* Will Cook).

NORTHERN WATERTHRUSH: One was rare but not too unexpected at the Savannah Spoil Site, Jasper County, SC, Jan. 12, as noted by Steve Calver.

WILSON'S WARBLER: This rare-in-winter warbler was reported four times, with singles at Tanglewood Park, Forsyth County, NC, Dec. 6 (Doug DeNeve and Pam Burke), at Chapel Hill, NC Dec. 19 (Terry Cox), at Lake Mattamuskeet, NC, Dec. 28 (John Fussell), and at Savannah N.W.R., SC, Feb. 13 (Mike Chapman *et al.*).

YELLOW-BREASTED CHAT: Always noteworthy in winter, single Chats were found on the Raven Rock State Park, SC, CBC Dec. 19 (Paul Hart), on the Clemson, SC, CBC Dec. 19 (Pete Worthington *et al.*), on the Southport, NC, CBC Jan. 3 (Sam Cooper), and at Atlantic Beach, NC, Jan. 6 (John Fussell).

WESTERN TANAGER: A female showed up at a feeder in Greenville, NC, Jan. 16 and remained until March (Ken Harrell), giving many observers the chance to see this bird. This species is now seen almost every year in the Carolinas.

CLAY-COLORED SPARROW: This winter's reports included singles on the Wayne County, NC, CBC Dec. 19 (Ricky Davis), the New Bern, NC, CBC Dec. 21 (John Wright), and at Morehead City, NC, Dec. 20 & 23 (John and Paula Wright, John Fussell and Susan Arrington).

LARK SPARROW: The only one reported this winter was on Ocracoke Island, NC, Jan. 1-2 (Hal Broadfoot).

GRASSHOPPER SPARROW: Always a good find in winter, singles were at the Savannah Spoil Site, SC, Dec. 24 (Steve Calver), on the Santee N.W.R., SC, CBC Jan. 2 (*fide* Lex Glover), and on the Wilmington, NC, CBC Jan. 2 (Greg Massey).

HENSLOW'S SPARROW: This secretive species was found at Huntington Beach State Park, SC, Dec. 5 (Gary Phillips, *fide* Jack Peachey), and along a power line clearing near Havelock, NC, Feb. 23 & 27 (John Fussell, Ray Winstead, Susan Arrington).

LECONTE'S SPARROW: One found on the Raleigh, NC, CBC Dec. 19 (Will Cook, Kent Fiala, Rachel Harden) was locally very rare and was the only one reported this winter.

LINCOLN'S SPARROW: Interesting winter sightings included one on the Southern Pines, NC, CBC Dec. 20 (Jay Carter), one on the Rocky River, SC, CBC Jan. 2 (*fide* Mike Chapman), one at the Savannah Spoil Site, SC, Feb. 9

(Steve Calver), and one coming to a feeder (!) in Carteret County, NC, Feb. 14 until the end of the month (John Fussell).

LAPLAND LONGSPUR: Huntington Beach State Park, SC, had a flock of at least four throughout the winter at the base of the jetty (Gary Phillips, Tim Kalbach, Jack Peachey, et al., m. ob.). Also, a total of eight were counted on the Litchfield-Pawleys Island, SC, CBC Dec. 30 (fide Jack Peachey). Elsewhere one was at Occoneechee Neck, Northampton County, NC, Jan. 3, as noted by Merrill Lynch.

SMITH'S LONGSPUR: South Carolina's second (first was in 1889!) Smith's was found with the Laplands at the base of the jetty at Huntington Beach State Park Jan. 10 (Tim Kalbach). The bird remained until at least mid-February and was seen by many observers during that period.

SNOW BUNTING: This winter's sightings included two at Bird Shoal, Beaufort, NC, Dec. 12 (John Fussell) and Dec. 20 (Mike Tove, Sam Cooper, *et al.*), two at Cape Hatteras, NC, early December until at least the 26th (Eric Dean, sev. ob.), an excellent total of 25 at Oregon Inlet, NC, Feb. 13 (Barbara Gearhart), and up to three at two locations in the Roan Mountain, NC, area November until Dec. 3 (Ed Schell, *fide* Rick Knight).

ROSE-BREASTED GROSBEAK: Late lingering Rose-breasteds included one at a feeder in Gastonia, NC, Dec. 5-6 (Steve Tracy), and one present from the fall that remained throughout the winter (!) at a feeder in Transylvania County, NC (*fide* Norma Siebenheller).

PAINTED BUNTING: Coastal reports were of one on the Cape Hatteras, NC, CBC Dec. 30 (fide Harry LeGrand), two at a Carteret County, NC, feeder Feb. 16 (John Fussell), and two on the Southport, NC, CBC Jan. 3 (Ricky Davis). Much rarer inland were one at a feeder in Benson, NC, Dec. 14-18 (Doug Shell) and one at a feeder in Edenton, NC, Jan. 29 until early February (Blair Currieri and Paris Trail).

YELLOW-HEADED BLACKBIRD: North Carolina produced the only reports with two males (one adult, one immature) on the north side of L. Mattamuskeet Dec. 13 (David and Susan Disher) and a female along US 64 in western Tyrrell County Dec. 31 (Ricky Davis).

BREWER'S BLACKBIRD: This winter's reports included one near Englehard, NC, Jan. 29 (Mary McDavit and Carolyn Bush), four in Boiling Springs, Cleveland County, NC, Jan. 2 (JoAnn Martin *et al.*), seven on the Clemson, SC, CBC Dec. 19 (Sid Gauthreaux, Carroll Belser, Bob and Barbara Maxwell, *et al.*), and an impressive count of 48 on the Santee N.W.R., SC, CBC Jan. 2 (*fide* Lex Glover).



CAROLINA BIRD CLUB

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The Chat

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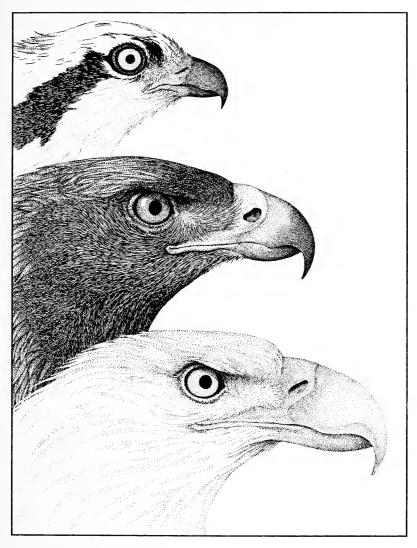
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The Chat

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THE CHAT

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Abundance and Distribution of Wintering Piping Plovers on the Coast of South Carolina: Findings from the 1997, 1998, and 1999 Mid-Winter Censuses

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Introduction

The Piping Plover (Charadrius melodus) is a threatened/endangered shorebird (Charadriiformes: Charadrii) that nests exclusively in North America in three regions: the Northern Great Plains/Prairie, Great Lakes, and Atlantic Coast (U.S. Fish and Wildlife Service 1996). The threatened Atlantic Coast population nests on sandy beaches from Newfoundland to the northeastern tip of South Carolina (Waites Island; Murray and McDavit 1993) (U.S. Fish and Wildlife Service 1996). The endangered Great Lakes population nests on a few sandy beaches in the upper Great Lakes, and the threatened Northern Great Plains/Prairie population breeds on alkaline lakes, reservoir beaches, and river islands from Alberta to Oklahoma (Haig and Plissner 1993). Wintering Piping Plovers inhabit mostly sandy beaches and sand and algal flats along Atlantic and Gulf coasts from North Carolina to Mexico, and to a relatively unknown extent, in the Caribbean (Haig and Plissner 1993, U.S. Fish and Wildlife Service 1996).

The decline of Piping Plovers has been attributed to loss and alteration of habitat, human disturbance, and increased predation following rapid coastal development beginning in the 1940s (see review U.S. Fish and Wildlife Service 1996). Since federal listing in 1986, most conservation efforts have focused on nesting Piping Plovers, with relatively little attention provided to nonbreeding plovers (U.S. Fish and Wildlife Service 1996, Plissner and Haig 1997). However, a multinational census of both nesting and wintering Piping Plovers was conducted in 1991 and 1996, resulting in the greatest number of breeding and wintering plovers ever recorded (Haig and Plissner 1992, Haig and Plissner 1993, Plissner and Haig 1997). Despite the extensive survey effort, only approximately a half (1996) to two-thirds (1991) of the breeding population was located during winter censuses. Relatively few wintering birds were observed on the Atlantic Coast and in the Caribbean areas surveyed (Haig and

Plissner 1993, Plissner and Haig 1997), suggesting that many wintering sites for Atlantic Coast breeders had not been located (Haig and Plissner 1993).

During the winter of 1986/87, Nicholls and Baldassarre (1990a) conducted the first extensive surveys of wintering Piping Plovers on the Atlantic coast, including South Carolina. However, due to the regional focus of their study, these authors did not survey all potential wintering sites in South Carolina. The South Carolina Department of Natural Resources (SCDNR) participated in both international winter censuses in 1991 and 1996 and also conducted similar censuses in 1990, 1992, and 1993 (Wilkinson and Spinks 1994, Haig and Plissner 1992, Plissner and Haig 1997). During these censuses, observers surveyed previously documented Piping Plover wintering sites and several additional beaches with potential wintering habitat. However, observers did not survey all potential Piping Plover habitat, especially prior to 1996 when survey effort was concentrated at major inlets with little coverage along many front beaches. Consequently, we initiated a survey of all beaches and sand bars in South Carolina to obtain a more accurate assessment of abundance and distribution of Piping Plovers during the winter. In this paper, we present results of the 1997, 1998, and 1999 mid-winter censuses, including distribution and numbers of Piping Plover, habitat characteristics of wintering sites, and numbers of people and dogs using beaches during censuses.

Methods

Censuses. During mid-January 1997 (8 - 21), 1998 (10 - 23), and 1999 (14 - 24), we coordinated a census of Piping Plovers on the coast of South Carolina. Observers surveyed all beaches and sand bars exposed at high tide (approximately 309 linear km; Table 1), logging 97, 83, and 77 observer-hours of survey time in 1997, 1998, and 1999, respectively. Observers surveyed the entire stretch of each beach, with the exception of portions of some beaches that lacked exposed substrate at high tide (e.g. Fripp Island), sections of Hilton Head Island with unsuitable shorebird habitat in 1997 and 1998, and the south end of Isle of Palms in 1998. In addition, observers surveyed a few impounded spoil disposal sites in 1998 and 1999 (approximately 21 linear km; 3.5 observer-hours). To minimize multiple counts of the same plovers, observers surveyed known Piping Plover sites located within 20 km on the same day. Observers conducted censuses within three hours of high tide, when plovers are most concentrated.

Twenty, 23, and 15 observers participated in the 1997, 1998, and 1999 censuses, respectively, with most (\geq 55%) sites surveyed by one person. Personnel from the SCDNR lower and upper coast Wildlife Diversity field offices censused most (\geq 80%) sites, while several volunteers experienced in bird identification censussed remaining sites. All participants received written instructions, data sheets, maps, and tide charts.

Participants observed birds with binoculars and spotting scopes from all-terrain vehicle [20 (1999) - 31(1998) % of sites], foot [15 (1999) - 28 (1997) %], motorboat [14 (1997) - 28 (1998) %), truck [0 (1997) - 13 (1999) %], or a combination of these. Observers categorized habitat as: 1) sand beach; 2) sand spit; 3) sandflat; 4) sand bar; 5) oyster-shell beach or oyster bank; 6) mudflat; 7) vegetation mat; and 8) vegetated shoreline. In addition, observers

categorized the body of water as: 1) ocean; 2) protected (e.g. bay, harbor, creek, lagoon); or 3) other. In 1998 and 1999, observers tallied the number of people and dogs during the census at each site and any observed disturbance to Piping Plovers.

Statistical Analysis. We did not directly compare the number of Piping Plovers among years because of the considerable variation in surveying effort among earlier census years (\leq 1996) and the dramatic increase in coverage of the coast after 1996. Consequently, prior to 1997, we only used data from the two international censuses (1991 and 1996) because these censuses yielded the greatest survey effort. In addition, we restricted the analysis to data from sites (n = 21) that were surveyed in both 1991 and 1996 (and from 1997 to 1999). We tested for differences in the number of Piping Plovers among years using a Kruskal-Wallis Test (SAS 1992) using PC-SAS (Vers. 6.12).

Results and Discussion

Distribution and Abundance. The distribution and total number of Piping Plover varied little among years: 103, 94, and 100 plovers used 16, 14, and 18 sites in 1997, 1998, and 1999, respectively (Table 1, Figures 1, 2, 3). Overall, Piping Plovers wintered at 26 sites, but plovers used only nine of these sites all three years. Each winter, Piping Plovers inhabited approximately a third of coastal beaches and sand bars, using sites from Hilton Head Island to Murrells Inlet, with the exception of 1999, when plovers inhabited Waites Island, the most northeastern island in the state. At most sites, plovers wintered in small groups of five birds or less (median: 4, 3, and 2.5 in 1997, 1998, and 1999, respectively). The greatest number of Piping Plover occurred on Kiawah Island in 1997 (N = 30) and 1998 (N = 22), and nearby Deveaux Bank in 1999 (N = 22) 24). Furthermore, the Kiawah, Deveaux Bank, Seabrook, and Skimmer Flats complex of islands situated between North Edisto River and Stono Inlet was the most important wintering area, with approximately half (57%, 1997; 51%, 1998; 43%, 1999) of the total number of plovers using these islands. A relatively large group (7 - 14%) of Piping Plovers used Harbor Island and Huntington Beach State Park each year.

Numbers of Piping Plover from 1997 to 1999 exceed the previous high mid-winter count in South Carolina (N=78; Plissner and Haig 1997) by about 25% and are approximately double the 1986/87 and early 1990s mid-winter counts ($N \le 53$; Nicholls and Baldassarre 1990a, Wilkinson and Spinks 1994). We suspect that most of the increase in numbers of Piping Plover is attributable to greater survey effort rather than to an increase in the wintering population. Observers from 1997 to 1999 surveyed more than twice the coastline than in 1996 (Plissner and Haig 1997) and seven times the coastline than in 1991 (Haig and Plissner 1992). Indeed, 11 - 32% of the plovers observed from 1997 to 1999 occurred at sites not surveyed in 1996, the year with the greatest survey effort prior to 1997. Moreover, abundance of plovers did not differ significantly among years (1991, 1996, 1997, 1998, 1999) in sites that were surveyed all five years (n = 21, Chisq. = 0.82, df = 4; P = 0.93).

From 1997 to 1999, Piping Plovers inhabited most previously documented wintering sites in at least one year: plovers occurred at 86% of sites used by plovers a decade earlier (Nicholls and Baldassarre 1990a); 91% of sites used in

the early 1990's (Wilkinson and Spinks 1994); and 92% of sites used most recently in 1996 (Plissner and Haig 1997). Sites used by Piping Plovers in earlier years, but not from 1997 to 1999, were Hunting Island, St. Phillips Island, and Sullivans Island. Observers from 1997 to 1999 documented several new Piping Plover wintering sites: Morris, Pritchard's, and Cedar islands; Debidue and Botany Bay Plantation beaches; North Santee and Lighthouse Island South sand bars; and Raccoon Key.

Habitat Characteristics of Wintering Sites. Overall, wintering Piping Plovers used sandy substrates on barrier islands, peninsula bars, and estuarine and offshore sand bars (Table 1). More specifically, plovers used sandflats (18-50%) and sand beaches (22 - 82%) more often than other substrates. In 1997 and 1998, most (>65%) plovers used habitat adjacent to protected bodies of water (e.g. tidal lagoons and creeks), rather than the ocean. In 1999, however, only slightly more plovers used protected bodies of water (52%) than ocean (48%) habitats. Most (\geq 59%) Piping Plovers occurred within 1 km of an inlet, especially plovers which used barrier islands and peninsula bars (\geq 79%). No plovers used impounded spoil disposal sites, vegetated shoreline, oyster banks, or oyster-shell beaches. Generalizations on habitat characteristics should be interpreted cautiously because censuses were conducted at mid to high tides only.

The coast of South Carolina is dynamic, especially on offshore islands, where habitat changes dramatically in a short period of time. During the winter of 1997/98, we observed a natural experiment which gave us further insight into habitat selection by wintering Piping Plovers. Lighthouse Island South, an offshore sand bar in Cape Romain National Wildlife Refuge, accreted on the southwestern end and formed a large (~5 ha) protected body of water with adjacent gradually-sloping sandflats during late fall 1997. During the 1998 census, we observed eleven Piping Plovers foraging on newly-formed sandflats adjacent to the protected body of water. Prior to January 1998, no Piping Plovers had been observed on this sand bar during monthly (January - October 1997) surveys of shorebirds (S. Dodd, unpubl. data), nor during other midwinter censuses of Piping Plover (Wilkinson and Spinks 1994, Plissner and Haig 1997). Nicholls and Baldassarre (1990b) concluded that habitat heterogeneity was a key factor influencing the wintering distribution of Piping Plovers on the Atlantic coast. We suspect that the newly-formed protected body of water and sandflats at Lighthouse Island South increased the diversity of foraging and loafing habitat on the sand bar.

Human Disturbance. A third (1999) to a half (1997 and 1998) of Piping Plovers wintered on developed beaches, however a large proportion of these plovers wintered on the northeast end of Kiawah Island, approximately 3 km from the nearest beach access or dwelling. Moreover, most sites used by Piping Plovers are undeveloped ($\geq 62\%$) and accessible by boat only ($\geq 56\%$). In 1998 and 1999, observers recorded no humans and dogs during censuses of most ($\geq 61\%$) sites used by Piping Plovers. For beaches where observers recorded both Piping Plovers and humans (median₁₉₉₈ number of people and dogs: 5 and 0, respectively; median₁₉₉₉ number of people and dogs: 21 and 2, respectively), no

observations of disturbance to Piping Plovers was noted. However, during the census of Huntington State Beach in 1997 we observed Piping Plovers flush in response to a bird-watcher and to recreational walkers with dogs. In addition, observers reported disturbance to other species of shorebirds by people and/or unleashed dogs at Dewees, Pawleys, and Sullivans islands, Myrtle Beach; and Folly Beach in at least one year. We cautiously conclude that most wintering Piping Plovers using the South Carolina coast are undisturbed by humans, at least in the middle of January. We recognize the limitations of our assessment of human disturbance, though, which did not quantify disturbance over a 24-hour period.

Conclusions. Overall, Piping Plovers wintered in small groups on a few scattered barrier islands, peninsula bars, and sand bars (Table 1, Figures 1, 2, 3). At wintering sites, plovers tended to use sandy substrates adjacent to protected bodies of water within 1 km of an inlet. A total of 94 (1998) to 103 (1997) mid-wintering plovers inhabited beaches on the South Carolina coast. The Deveaux Bank, Kiawah, Seabrook, and Skimmer Flats group of islands was the most important area for Piping Plovers ($N_{1997} = 59$; $N_{1998} = 48$; $N_{1999} = 43$), ranking with other wintering areas considered internationally important (see Haig and Plissner 1993, Plissner and Haig 1997). Moreover, this complex of islands qualifies as an Important Bird Area (IBA; American Bird Conservancy) because it provided wintering habitat for approximately 2% of the Atlantic Coast and Great Lakes breeding populations of Piping Plover (based on breeding data from the 1996 International Census; Plissner and Haig 1997).

We suggest that future censuses of Piping Plovers include surveys of all beaches, sand bars, and associated sand and mud flats in a particular state or region. Our results demonstrate that habitat not used by Piping Plovers one year can change dramatically to be used by a large group of plovers by the next year. Consequently, without surveying the entire coast, it is difficult to assess population trends accurately. Over the years, as more sites along the South Carolina coast have been surveyed, the total number of Piping Plovers has also increased. We found no significant difference in the abundance of plovers among years in sites surveyed in both international census years (1991 and 1996) and from 1997 to 1999, suggesting that the increase in numbers is due to greater survey effort rather than an increase in the wintering population. If all beaches are surveyed during each census, the number of plovers can be compared directly among years.

As the South Carolina coast continues to be developed, it is critical that we protect threatened populations of Piping Plover as well as other species of shorebirds that use coastal habitats. The number of people living on the coast of South Carolina is expected to increase each year by 0.3%, with an additional 17,700,000 annual visitors (S.C. Department of Health and Environmental Control 1998). Monitoring the distribution and abundance of Piping Plovers is important because it provides data for evaluating potential coastal development, beach renourishment, and dredging activities, all of which can affect coastal habitats. For example, data from our censuses were used to evaluate future development at Waites and Morris Islands, beach renourishment at Hilton Head

Island, and channel dredging at Stono Inlet. With the projected increase in the coastal population, we think it is also critical to monitor human use of the coast, including beaches protected from development. Our results show that over a three-year period wintering Piping Plovers used half the beaches in South Carolina, including several developed beaches. This suggests the need to modify existing beach-recreation policies as the number of people and their dogs increase. To minimize disturbance from dogs, we urge property owners and land managers to create and/or enforce leash laws.

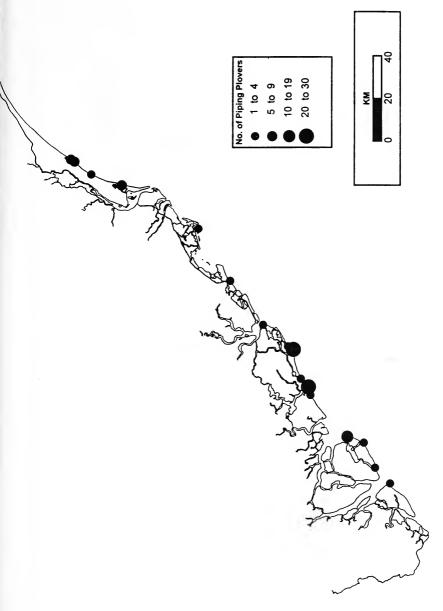


Figure 1. Distribution of wintering Piping Plovers on the coast of South Carolina during January 1997.

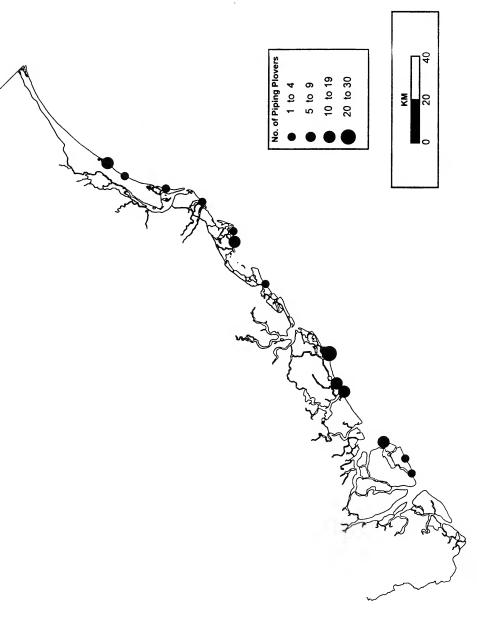


Figure 2. Distribution of wintering Piping Plovers on the coast of South Carolina during January 1998.

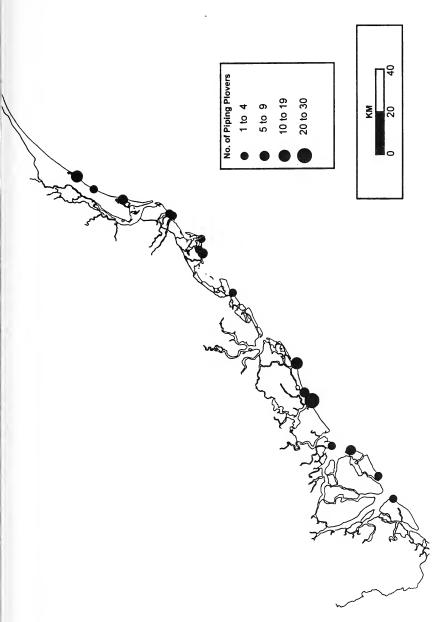


Figure 3. Distribution of wintering Piping Plovers on the coast of South Carolina during January 1999.

Table 1 Number of Piping Plover, description of sites, and habitat used by plovers during mid-winter (January) censuses of the South Carolina coast; 1997, 1998, 1999

Site	1997	Number of Piping Plover 1997 1998 1999	1999	Site Description	1997	Piping Plover Habitat	1999	Linear km Surveyed ^c
Waites Island Little Biver Inlet	0	0	~	1 llb d 1 3 4 6			-	r.
Route:Garden City-Hog Inlet (Myrie Beach area)		0		:				52.0
Garden City-south point (Murrells Inlet)	5	0	0	1,111,3	111			1.0
Huntington Beach State Park	7	5	4	I, II a 1, 3, 6	ll a 3, l a 1	a 1		4 8
Litchfield Beach	-	-	-	1, 111, 3, 6	ll f 3	=======================================	1,1	6.4
Pawleys Island	0	0	0	1, 11 b 1, 2, 3, 4				8.0
Debidue Beach	0	0	89	1, 11 b 1, 2, 3			1161	8.0
North Island	5	7	0	1, 11 b 1, 3, 4, 6, 8	# P 4	161		15.2
Sand Island	0	0	0	1,1161,2,3,6				4 6
South Island	0	0	-	1, 11 b 1, 2, 3, 6			11 6 1	2.0
North Santee sand bar	0	-	7	I, II d 1, 3, 4		II d 1	11 d 3	1.6
Cedar Island	0	0	-	I, II b 1, 3, 8			11 6 3	2.7
Murphy Island	0	0	0	I, II b 1, 3, 6				9.6
Cape Island	7	7	7	I, II b 1, 2, 3, 4, 6	1 p 1	11 b 1	i, ii b 1	12.2
Lighthouse Island	e u	na	8					00
Lighthouse Island South	0	Ξ	6	1, 11 d 1, 2, 3, 4		H d 3	1, 11 d 1; 11 d 3	1.6
Raccoon Key	0	0	-	1, 11 b 1, 2, 3, 5, 6, 8			11 6 3	66
White Banks⁴	0	0	0	1, 11 e 3, 5, 6, 8				2.1
Marsh Island⁴	0	0	0	1, 11 e 3, 4, 5, 6, 8				0.5
New Island	0	na	a	11 43				0.1
Bull Island	7	7	က	1, 11 b 1, 2, 3, 4, 6, 8 1 b	1 p 1	II b 1	1 b 1	93
Price's Inlet sand bar	Bu	na	0	1, 11 d 2, 3, 4				10
Capers Island	0	0	0	1, 11 b 1, 3, 8				33
Dewees Island	0	0	0	1, 11 b 1, 2, 3, 4				4.3
AIW spoil sites-Harbor R. and Capers Crk.	0	0	0	6 6 III				2.0
Isle of Palms*	0	0	0	1b 1, 2, 3, 4				9.6
Sullivans Island	0	0	0	1,11 b 1, 2, 4, 6				5.8
Morris Island	-	0	0	1, 11 b 1, 3, 6, 7	1 p 1			7.2
Folly Beach	0	0	0	1,11 b 1, 3				10.4
Bird-Key-Stono	a	na	ā					0 0
Skimmer Flats	-	က	0	I, II c, d 1, 2, 3, 4	11 d 3	II c 1		2.4
Kiawah Island	30	22	Ξ	1, 11 b 1, 2, 3, 6	162, 1161, 1163, 1166 1, 1161	1661,1161	161;1,1163;1166	•
Seabrook Island	4	5	80	1, 11 b 1, 2, 3, 4, 6	11 5 3, 11 5 6	II b 1	11 6 2	
Deveaux Bank	54	5	24	1, 11 d 1, 2, 3, 6	11 4 2, 11 4 3, 11 4 6	I, II d 1	1, 11 d 1, 11 d 3	7.0
Botany Bay Island	0	0	0	I, II b 1, 2				2.9
Botany Bay Plantation Beach	7	0	0	1, 11 b 1, 2, 3, 5, 6	Ⅱ b 3			3.4
nterlude	0	0	0	I, II b 1, 3, 6				1.2
Eddingsville Beach	0	0	0	1, 11 b 1, 3, 5				3.7
Edisto Island	0	0	0	1,1161,2				98
Pine Island	0	0	0	161				2 8

Table 1. Continued

	Numbe	Number of Piping Plover	Plover			Piping Plover Habitatb	۾	Linear km
Site	1997	1998	1999	Site Description	1997	1998	1999	Surveyed
Harbor Island	10	13	7	1,1161,2,3	I, II b 2	161.1163 161	1 p 1	. 58
Hunting Island	0	0	0	161,3				3.4
Fripp Island	4	0	0	1b1,3,4	1 b 1			0.5
Pritchards Island	0	-	0	1, 11 b 1, 3		161		1.9
Little Capers Island	4	က	7	1, 11 b 1, 2, 3	1 b 1	161	l. b 1	8.4
Bay Point Island	0	0	0	1, 11 b 1, 2, 3				8.4
Bay Point Shoal	na	0	0	1 d 4				8.0
St. Phillips Island	0	0	0	I, II b 1, 2, 3, 4				1.8
Joiner Bank	-	0	0	1 d 4	1 d 4			2.0
Hilton Head Island ^e	0	0	-	I, 11 b 1, 3			11 b 3	22.2
Daufuskie Island	0	0	0	1b1				1.1
Turtle Island	0	0	0	161,6,8				0.3
Savannah River Spoil Site	SU	0	0	6 B III				19.0
South Carolina Total	103	94	9					329.8

f) peninsula bar; g) impounded spoil disposal site. Substrate: 1) sand beach; 2) sand spit; 3) sandflat; 4) sand bar; 5) oyster-shell beach or oyster bank; 6) mudflat; Body of water: I) ocean; II) protected bay, harbor, lagoon, creek or river; III) other. Shoreline: a) mainland; b) barrier island; c) spoil island; d) bar; e) other island;

7) vegetation (algal) mat; 8) vegetated shoreline. Habitat in which Piping Plover(s) observed.

Distance measured using either a hand-held GPS unit (Garmin 38) or estimated with USGS-DLG maps.

Surveyed later than census period in 1997 and/or 1998: AIW - 28 February 1997 and 28 January 1998; Marsh Island and White Banks - 27 February 1997,

South end of Isle of Palms not surveyed in 1998 (~ 6.4 km surveyed). Only areas with potential shorebird habitat surveyed on Hilton Head Island in 1997 and 1998 (~ 5

na. Habitat not available because island was under water or only marsh exposed at high tide. ns. Not surveyed.

Acknowledgments

We are indebted to J. Coker, M. Dodd, and T. Murphy for conducting censuses in the southern part of the coast, and to C. Hope and M. Chandler for providing logistical support. We are especially grateful to the following volunteers for enthusiastically assisting us with censuses in one or more years: S. Adair, V. Atkins, W. Allen, G. Beaton, G. Dugas, B. and B. Maxwell, J. McKenzie, M. Milligan, P. Nugent, K. Parsons, J. Peachey, W. Post, T. Powers, B. Smith, T. Spirers, J. and M. Stephenot, P. Turner, M. Whitehead, C. Walters, and C. Williams. We thank M. Dodd, T. Murphy, J. Plissner, and W. Post for thoughtful reviews of the manuscript; and M. Dodd for assistance with Atlas GIS figures. Pittman Robertson hunter excise taxes funded the 1997 census, and a grant from the U.S. Fish and Wildlife Service funded the 1998 and 1999 censuses.

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Fall 1998 North American Migration Count in South Carolina

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The 1998 Fall North American Migration Count in South Carolina was held on the third Saturday in September (19 September 1998). Some 104 observers in 50 parties found a grand total of 202 species and about 32,041 individual birds in South Carolina. Of these, some 39 species were "exclusives," that is, found in only one county. The distribution of exclusives was as follows:

15 exclusives - Charleston County

4 exclusives – Georgetown County, Jasper County, Orangeburg County, Spartanburg County

3 exclusives – Greenville County

2 exclusives - Aiken County, Newberry County

1 exclusive - Colleton County.

Counts were held in 15 of the 46 counties of the state (by geographic region, with county seat):

Coastal (C) and Outer Coastal Plain (OCP):

Charleston

(Charleston)

Colleton

(Walterboro)

Georgetown Jasper (Georgetown) (Ridgeland)

Inner Coastal Plain (ICP):

Orangeburg

(Orangeburg)

Piedmont (P) and Inner Coastal Plain (ICP) (i.e. Fall Line area):

Aiken

(Aiken)

Lexington

(Lexington)

Richland

(Columbia)

Piedmont (P):

Cherokee

(Gaffney)

Chester

(Chester)

Fairfield (Winnsboro)
Newberry (Newberry)
Spartanburg (Spartanburg)
Union (Union)

Mountains (M) and Piedmont (P):

Greenville (Greenville)

AIKN -Aiken County, SC. (Piedmont and Inner Coastal Plain)

Total: 114 species; 4764 individuals.

6:30 AM to 8:30 PM. Temp. 73° to 84° F. Wind E to NE, 5 to 8 mph. AM cloudy, with a trace of rain; PM mostly cloudy. Regular observers: 19 in field in 8 parties. Total regular party-hours: 54.5; total regular party-miles: 213.25; 43.25 hours and 23.5 miles on foot; 10.25 hours and 188.75 miles by car; 1 hour and 1 mile by bicycle. Feeders: 2 observers, 2 feeding stations, 3.5 hours watching feeders. Owling observers: 1 in 1 party. Owling party-hours: 2; owling party-miles: 9.5. Totals: 60 party-hours; 222.75 party-miles; 19 participants.

Coordinator: Anne Waters, 1621 Apple Valley Drive, Augusta, GA 30906. Participants: Dan Connelly, Carol Eldridge, Larry Eldridge, Liz Goodson, Jerry Henshaw, Bill Hopkins, Laura Hopkins, Christine Huzella, Sandra Johnson, Paul Koehler, Mark Komoroski, Richard Lux, Marylyn McLeod, Abi Vitale, Alice Walker, Doug Walker, Anne Waters, Vernon Waters, Calvin Zippler.

The Aiken County count was well organized, with 8 parties in the field. As a result, it had the highest species count of any inland county (114), second only to coastal Charleston County (156 species).

Participants in Aiken County found 2 exclusives -- 2 Mississippi Kites (late), and a Blue-winged Warbler. Other species of note included a Peregrine Falcon, 20 Ruby-throated Hummingbirds (high), a very early Yellow-bellied Sapsucker, and 3 late Cliff Swallows.

CHSTN - Charleston County, SC. (Coastal and Outer Coastal Plain)

Total: 156 species; 12,303 individuals.

5:00 AM to 5:30 PM. Temp. 74° to 85° F. Wind NW, 5 to 10 mph. AM cloudy, trace of rain; PM cloudy, trace of rain. Regular observers: 23 in field in 11 parties. Total regular party-hours: 60; total regular party-miles: 510; 41 hours and 44 miles on foot; 19 hours and 466 miles by car. Feeders: 4 observers, 4 feeding stations, 14.5 hours watching feeders. Owling observers: 3 in 3 parties; owling party-hours: 2.5; owling party-miles: 1.5. Totals: 77 party-hours; 511.5 party-miles; 23 participants.

Coordinator: Perry Nugent, 2260 Dallerton Circle, Charleston, SC 29414. Participants: Van Atkins, Mrs. M.A. Aldenderfer, Rebecca Ashley, Gifford Beaton, Betty Blanford, Sharon Brown, Jim Brownlee, Sue Brownlee, Joan Cole, Edward Conradi, George Crumley, Janice Fanning, Dennis Forsythe, Donna Forsythe, Ann Kent, Ann Knight, Perry Nugent, Ben Smith, Liz Smylie, Joe Stevenot, Martha Stevenot, Charles Walters, Craig Watson.

Charleston County participants recorded 15 exclusive species, far more than any other county, reflecting good coverage of a great birding area. Species of note included 395 Brown Pelicans (high), 11 Bald Eagles (high), a Virginia Rail (exclusive), 106 American Oystercatchers (high), 7 Marbled Godwits (exclusive), 1 American Woodcock (exclusive), 15 Sandwich Terns (exclusive), 26 Great Horned Owls (high), 4 Chuck-will's-widow (exclusive), 20 Ruby-throated Hummingbirds (high), 1 Hairy Woodpecker (locally scarce), 3 Willow Flycatchers (exclusive), 448 Red-eyed Vireos (very high count), 3 Golden-crowned Kinglets (exclusive, early), 9 Veeries (high), 6 Gray-cheeked Thrushes (high), 7 Yellow Warblers (exclusive), 3 Cape May Warblers (exclusive), 7 Black-throated Blue Warblers (exclusive), 1 Kentucky Warbler (exclusive), 3 Bachman's Sparrows (exclusive), 25 Painted Buntings (exclusive, high count), and 50 Rusty Blackbirds (exclusive, early).

CHKE - Cherokee County, SC. (Piedmont)

Total: 55 species; 729 individuals.

Temp. 70° to 81° F. Wind NE to SE, 7 to 12 mph. AM partly cloudy; PM partly cloudy. Regular observers: 7 in field in 5 parties. Total regular party-hours: 12; total regular party-miles: 61; 9 hours and 12 miles on foot; 3 hours and 49 miles by car. Totals: 12 party-hours; 61 party-miles; 7 participants.

Counters in Cherokee County had a typical day in the field for late September. No rarities or high counts were recorded, and the number of species found was very much in line with the level of coverage.

Coordinator: Lyle Campbell, 126 Greengate Lane, Spartanburg, SC 29307. Participants: Claude Cobb, Ken Garrett, J.B. Hines, Myra Hines, Karla Lavender, Scott Lavender, Ed Wilde.

CHSTR - Chester County, SC. (Piedmont)

Total: 60 species; 703 individuals.

6:15 AM to 6:15 PM. Temp. 72° to 85° F. Regular observers: 4 in field in 3 parties. Total regular party-hours: 20.5; total regular party-miles: 216.5; 8.5 hours and 10.5 miles on foot; 12 hours and 206 miles by car. Totals: 20.5 party-hours; 216.5 party-miles; 4 participants.

Participants in Chester County had a rather dull day in the field, turning up only 60 species and very few individuals. The 2 Barn Owls were at the usual spot. The best count was probably 4 Little Blue Herons.

Coordinator: Albert Conway, 1672 Deer Run Road, Catawba, SC 29704. Participants: Albert Conway, Gail B. Ice, Gail C Ice, Al James.

CLTN - Colleton County, SC. (Coastal and Outer Coastal Plain)

Total: 83 species; 1118 individuals.

Regular observers: 2 in field in 1 party. Total regular party-hours: 8.0; total regular party-miles: 143; 1 hour and 1 mile on foot; 7 hours and 142 miles by car. Totals: 8.0 party-hours; 143 party-miles; 2 participants.

Colleton County was covered by a single party of counters, who turned in a nice count without any true rarities. There was one exclusive (King Rail). Four species of doves (out of five on the county list) were counted, including

a good count of 35 Eurasian Collared-Doves. Next year perhaps we will find even the White-winged Dove at Bennetts Point or Edisto Beach.

Coordinator: Dennis Forsythe, 748 Swanson Ave., Charleston, SC 29412. Participants: Dennis Forsythe, Donna Forsythe.

FFLD - Fairfield County, SC. (Piedmont)

Total: 81 species; 630 individuals.

5:00 AM to 11:30 AM. Temp. 69° to 70° F. Wind ESE to ENE, 0 to 5 mph. AM partly cloudy; PM partly cloudy. Regular observers: 7 in field in 2 parties. Total regular party-hours: 6.5; total regular party-miles: 5.5; 6.5 hours and 5.5 miles on foot. Owling observers: 1 in 1 party; owling party-hours: 2.5; owling party-miles: 0. Totals: 9 party-hours; 5.5 party-miles; 7 participants.

This fall there were two parties reporting from Fairfield County, with typical results. No exclusives were found. There was a nice high count of 11 Ruby-throated Hummingbirds. The strongest showing on the count was in the thrush family, including 4 Veeries, 3 Gray-cheeked Thrushes, 13 Swainson's Thrushes, 1 Hermit Thrush, and 6 Wood Thrush, reflecting a good nocturnal thrush migration and an observer (Donna Bailey) skilled enough in thrush calls to identify them.

Coordinator: Donna Bailey, 176 Raven's Place, Winnsboro, SC 29180. Participants: Buddy Bailey, Donna Bailey, Tim Kalbach, Nancy Lyman, Doris Slyce, L.O. Slyce, Gary Sowell.

GTWN - Georgetown County, SC. (Coastal and Outer Coastal Plain)

Total: 98 species; 1229 individuals.

11:00 AM to 5:00 PM. Temp. 74° to 80° F. Wind NE, 5 mph. AM cloudy; PM cloudy. Regular observers: 3 in field in 2 parties. Total regular party-hours: 10; total regular party-miles: 63.5; 7.5 hours and 5.5 miles on foot; 2.5 hours and 58 miles by car. Totals: 10 party-hours; 63.5 party-miles; 3 participants.

Counters in Georgetown County turned up four exclusive species (American Bittern, Piping Plover, Semipalmated Sandpiper, and Least Tern). Other goodies found in the great coastal area included an early Yellow-bellied Sapsucker and a rare Least Flycatcher.

Coordinator: Jack Peachey, 103 Walnut Circle; Conway, SC 29526. Participants: Jack Peachey, Gary Phillips, Tonya Spires.

GRVL - Greenville County, SC. (Mountains and Piedmont)

Total: 22 species; 1347 individuals.

Temp. 64° to 74° F. Wind NE, 5 mph. AM cloudy with a trace of rain; PM partly cloudy. Stationary: 6 observers, 1 station, 6.2 stationary hours. Totals: 6.2 party-hours; 0 party-miles; 6 participants.

The only count submitted from Greenville County was from the Caesar's Head hawk watch, so it was very limited in total species. Nevertheless the hawk watchers had three exclusives -- Common Raven (this is the best place in South Carolina to observe this species), Cedar Waxwing, and Dark-eyed Junco. The best high count was 1244 Broad-winged Hawks, surely a thrill for the hawk watchers.

Coordinator: Irvin Pitts, 1156 Old Orangeburg Road, Lexington, SC 29073. Participants: Elizabeth Galloway, Tammy King, Bill Morrell, Irvin Pitts, Mitchell Rice, Shawn Wolfe.

JSPR - Jasper County, SC. (Coastal and Outer Coastal Plain)

Total: 65 species; 1543 individuals.

8:00 AM to 7:30 PM. Temp. 74° to 82° F. AM rain; PM rain. Regular observers: 3 in field in 2 parties. Total regular party-hours: 11.5; total regular party-miles 96; 3.5 hours and 2 miles on foot; 4 hours and 54 miles by car; 4 hours and 40 miles by boat. Totals: 11.5 party-hours; 96 party-miles; 3 participants.

Counters in Jasper County only found 65 species, but nevertheless this included 4 exclusives -- American Black Duck (local breeder), Northern Shoveler, Green-winged Teal, and Purple Gallinule (local breeder). Other rarities and high counts included 24 Pied-billed Grebes, 163 American Avocets, and a Buff-breasted Sandpiper.

Coordinator: Patricia E. Metz, U.S. Fish & Wildlife Service, Parkway Business Center, Suite 10, 1000 Business Center Drive, Savannah, GA 31405. Participants: John Metz, Patricia Metz, Ray Porter.

LXTN - Lexington County, SC. (Piedmont and Inner Coastal Plain)

Total: 27 species; 134 individuals.

7:30 AM to 8:45 AM. Temp. 70° to 75° F. Wind SW, 0 to 5 mph. AM cloudy. Regular observers: 1 in field in 1 party. Total regular party-hours: 1.25; total regular party-miles: 2; 1.25 hours and 2 miles on foot. Totals: 1.25 party-hours; 2 party-miles; 1 participant.

Lexington County's 27 species were found on a morning walk by a single participant. There were no exciting rarities or high counts.

Coordinator: Jerry Griggs, 1813 Highbrook, Columbia, SC 29212. Participant: Jerry Griggs.

NWBY - Newberry County, SC. (Piedmont)

Total: 42 species; 150 individuals.

1:00 PM to 4:00 PM. Temp. 70° to 75° F. PM partly cloudy. Regular observers: 3 in field in 1 party. Total regular party-hours: 3; total regular party-miles: 5.5; 2.25 hours and 1.5 miles on foot; 0.75 hours and 4 miles by car. Totals: 3 party-hours; 5.5 party-miles; 3 participants.

Newberry County's count was just three hours by a single party (who had spent the morning in neighboring Fairfield County). The emphasis was on migrant warblers. Counters found 13 species, including two exclusives -- Golden-winged Warbler and Blackpoll Warbler.

Coordinator: Tim Kalbach, 3113 River Drive, Columbia, SC 29201. Participants: Tim Kalbach, Nancy Lyman, Gary Sowell.

ORBG - Orangeburg County, SC. (Inner Coastal Plain)

Total: 90 species; 1844 individuals.

7:30 AM to 9:00 PM. Temp. 76° F to 85° F. AM cloudy; PM partly cloudy. Regular observers: 2 in field in 1 party. Total regular party-hours: 12; total regular party-miles: 151; 4 hours and 2 miles on foot; 8 hours and 149 miles by car. Owling observers: 2 in 1 party; owling party-hours: 1.5; owling party-miles: 24. Totals: 13.5 party-hours; 175 party-miles; 2 participants.

In Orangeburg County a good single-party count turned up 4 exclusives, 3 of which were found at the Orangeburg sod farms (American Golden-Plover, Upland Sandpiper, and Horned Lark). Other good finds were an exclusive Yellow-bellied Flycatcher and four species of doves (Rock Dove, Mourning Dove, Eurasian Collared-Dove, and Common Ground-Dove).

Coordinator: Robin Carter, 4165 East Buchanan Drive, Columbia, SC 29206. Participants: Robin Carter and Caroline Eastman.

RCHL - Richland County, SC. (Piedmont and Inner Coastal Plain)

Total: 32 species; 224 individuals.

7:30 AM to 10:45 PM. Regular observers: 1 in field in 1 party. Total regular party-hours: 3.25; total regular party-miles: 46; 2.25 hours and 3 miles on foot; 1 hour and 43 miles by car. Totals: 3.25 party-hours; 46 party-miles; 1 participant.

Richland County was represented by a single observer's count, with no unusual species found and no high counts of individuals.

Coordinator: Robin Carter, 4165 East Buchanan Drive, Columbia, SC 29206-2846. Participant: Henry Fuseler.

SPTB - Spartanburg County, SC. (Piedmont)

Total: 90 species; 4461 individuals.

Temp. 60° to 81° F. Wind NE to SE, 7 to 12 mph. AM partly cloudy; PM partly cloudy. Regular observers: 21 in field in 10 parties. Total regular party-hours: 43.05; total regular party-miles: 250.5; 25.25 hours and 22.5 miles on foot; 14.8 hours and 220 miles by car; 3 hours and 8 miles by boat. Feeders: 26 observers, 19 feeding stations, 40 hours watching feeders. Totals: 83.05 party-hours; 250.5 party-miles; 45 participants.

As usual the Spartanburg County count was very well organized and produced a number of interesting records, including 4 exclusive species -- Red-breasted Nuthatch, Nashville Warbler (a species rarely found anywhere in the state), Orchard Oriole, and Purple Finch. Also remarkable was a count of 60 Ruby-throated Hummingbirds.

Coordinator: Lyle Campbell, 126 Greengate Lane, Spartanburg, SC 29307. Participants: Beth Bartel, Susan Bennett, Tim Brown, Lyle Campbell, Sarah Campbell, Marion Clark, Dan Codespoti, G.R. Davis, Dick Deahl, Linda Deahl, John Derrick, Juli Derrick, Stan Easley, Sam Floyd, Pat Fowler, Ray Fowler, Dennis Funk, Onoosh Gahaghan, Ron Gahaghan, Robin Gilman, Teresa Glen, John Green, Alice Henderson, Don Henderson, Gladys Henry, J.B. Hines, Myra Hines, Marilyn Hubbell, Jack Jennings, Joel Jones, Micky Marotte, Mary Ann Meyers, Jim Miller, Margaret Miller, Bill Moody, Ken Pearson, Lisa Pearson,

Bob Powell, Sandra Powell, Virginia Scott, Walton Scott, Mac Shealy, Dick Thorpe, Lois Thorpe, Gerald Thurmond.

UNIN - Union County, SC. (Piedmont)

Total: 49 species; 862 individuals.

7:00 AM to 7:30 PM. Temp. 69° to 84° F. Wind calm. AM cloudy; PM partly cloudy. Regular observers: 2 in field in 1 party. Total regular party-hours: 12.5; total regular party-miles: 159; 1 hour and 1 mile on foot; 11.5 hours and 158 miles by car. Totals: 12.5 party-hours; 159 party-miles; 2 participants.

Union County was represented by a respectable single party count, which found fair numbers of the expected species, including a somewhat early Ruby-crowned Kinglet. There were no true rarities, and no exclusive species found.

Coordinator: Evelyn D. Richbourg, 208 Spruce Street, Union, SC 29379. Participants: Sally Parker and Evelyn Richbourg.

Summary of Fall 1998 NAMC in South Carolina

State-wide Total: 202 species, 32,041 individuals.

Observers: 104 in 50 parties; Party-hours: 156.25 hours on foot, 93.8 hours by car, 7 hours by boat, 1 hour by bicycle. Party-miles: 136 miles on foot, 1737.75 miles by car, 48 miles by boat, 1 mile by bicycle. Feeder watch: 58 hours by 32 watchers at 25 feeding stations. Stationary: 6.2 hours by 6 observers at 1 station. Owling: 8.5 hours and 35 miles by 7 observers in 6 parties.

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1998 Fall Migration Day In South Carolina

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General Field Notes

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Bobolinks Nest in Haywood County, NC

Norma and Bill Siebenheller 187 Glen Cannon Drive Pisgah Forest, NC 28768

On 20 July 1998 we observed a male and female Bobolink (*Dolichonyx oryzivorus*) exhibiting agitated behavior along the Art Loeb trail on a mountain bald in Haywood County, just outside the boundary of the Shining Rock Wilderness Area. That day, and again on 22 July 1998, we saw the female carrying small caterpillars to hidden places in the weeds, then emerging a minute later without the food. This behavior is consistent with the presence of nestling or recently fledged young birds.

On 20 July 1998, we saw both a male and female Bobolink very near the trail. They flew over the trail several times as we watched. Finally, we saw the female perch on a blueberry bush about 40 feet from us on the east side of the trail, carrying a bright green caterpillar. She chirped for more than a minute, obviously aware of and disturbed by our presence. She dropped down into the grasses near the bush and emerged a few seconds later without the caterpillar.

We did not attempt to find the nest (or just-fledged young, if that were the case) as we thought it would be too disruptive to the birds.

On 22 July 1998 we relocated the birds about 100 feet farther north than they had been two days earlier. Again, we saw them on both east and west sides of the trail during our half-hour stay. The male spent most of the time perched on a large blueberry bush chipping loudly, but occasionally flew into the grass and on one occasion, fluttered above the area in typical Bobolink fashion. We did not observe the male carrying food. The female was seen bringing several caterpillars of different sizes to the same perch, about 100 feet away on the west side of the trail, and then dropping down into the grasses with them and emerging a few seconds later without the food.

The breeding area was at an elevation of 6214 ft., just south of Black Balsam Knob, approximately one-half mile from the intersection of the Art Loeb trail with Forest Road 816. The bald itself is treeless, with many weedy plants such as Cow Parsnip (*Heracleum lanatum*), Turk's Cap Lily (*Lilium michauxii*), and Northern Bush-Honeysuckle (*Diervilla lonicera*) interspersed

among several species of grasses and sedges, along with numerous small blackberry (*Rubus canadensis*) and blueberry (*Vaccinium constablaei*) bushes. The birds were observed perching on many of these plants above the grasses on both sides of the trail.

Simpson (1994) did not include Bobolink in the annotated list of species. In addition, Larry Gray, a regular hiker along the Art Loeb trail who originally reported the presence of this pair to us, had never seen Bobolinks there before late June 1998. Presumably, therefore, this is a newly-adopted breeding site for the species.

Photographs of both male and female Bobolinks, taken on 22 July 1998 by Ludwig Kempe, are on file at the North Carolina State Museum of Natural Sciences.

Literature Cited

Simpson, M B, Jr. 1994. Bird Life of North Carolina's Shining Rock Wilderness. Occasional Papers of the North Carolina Biological Survey and at the North Carolina State Museum of Natural Sciences, 1994-1, Raleigh.

CAROLINABIRDS

Carolinabirds is an Internet e-mail discussion group about birds and birding in the Carolinas. Subscribers frequently post sightings to it similar to those found in Briefs for the Files, but unusual behavior receives more attention. Subscriptions are free. To subscribe, address an e-mail message to <majordomo@duke.edu>. Don't fill in the subject line. As your message, simply put, "subscribe carolinabirds" (without the quotes). You will receive a confirmation and more information shortly. Submissions for Briefs for the Files should be sent directly to Ricky Davis.

Sandhill Crane in Transylvania County, NC

Norma and Bill Siebenheller 187 Glen Cannon Drive Pisgah Forest, NC 28768

On 10 January 1998 we observed a Sandhill Crane (*Grus canadensis*) in a grassy farm field along Country Club Road, Transylvania County, NC, in the French Broad River valley about three miles west of the city of Brevard.

The bird was standing approximately 100 feet from the road when we first saw it. We were struck immediately by the large size, gray color, obvious red mark on the forehead, white cheek patch, and downturned tail feathers. The shape was quite different from that of the Great Blue Heron (*Ardea herodias*), which we see commonly here. Through binoculars we could see that the bird had considerable brownish coloring on its body and wing feathers, a mark of an immature bird. Also, the red on the bird's crown was not quite as extensive as it is in a full adult.

Over the next week, dozens of local birders saw the Sandhill Crane. It was not present every time we and others visited the site, but it appeared at least every other day during that period. The bird was last observed on 17 January 1998.

A photograph, taken by Ludwig Kempe, is on file at the North Carolina State Museum of Natural Sciences. This is the first documented record of Sandhill Crane in Transylvania County.

The day before we found this bird, on 9 January 1998, Wayne Forsythe had observed a different Sandhill Crane on a farm field in Mills River, Henderson County, NC. The cranes were later seen simultaneously in these two places by different birders, confirming that there were indeed two different birds. Forsythe's Sandhill Crane was the first ever recorded for Henderson County and stayed a month before finally departing. On 8 February 1998, Wayne Forsythe observed two Sandhill Cranes flying by Jackson Park, Hendersonville, Henderson County, NC (*Chat* 62:3, p. 162).

CBC Rare Bird Alert (704) 332-BIRD

BRIEFS FOR THE FILES

Ricky Davis 608 Smallwood Drive Rocky Mount, NC 27804 RJDNC@aol.com

(All Dates Spring 1999)

Briefs for the Files is a seasonal collection of uncommon-to-rare or unusual North and South Carolina bird sightings and events which do not necessarily require a more detailed field note or article. Reports of your sightings are due the 20th of the month after the end of the previous season.

Winter: December 1 - February 28, due March 20

Spring: March 1 - May 31, due June 20 Summer: June 1 - July 31, due August 20

Fall: August 1 - November 30, due December 20

Reports can be submitted in any format, but I prefer that you type them and list the sightings according to the birds in checklist order (not according to dates or locations). If you submit your report to me through e-mail, please type your report directly into the message or copy it from a word processing program directly into the message. You may also attach your file to the e-mail, but if you do, please let me know the program used and also send a second version saved as a text (.txt) file.

Suitable reports for the Briefs include any sightings you feel are unusual, rare, noteworthy, or just plain interesting to you in any way! It is my responsibility to decide which reports merit inclusion in the Briefs.

Please be sure to include details of any rare or hard-to-identify birds.

I rely in part on sightings reported in Carolinabirds. Please don't, however, rely on me to pick up your sightings from Carolinabirds. Instead, please also send your sightings directly to me as described above.

If I feel that your sighting warrants a field note, I will contact either you or the appropriate state field notes editor. You may, of course, submit your field note directly to the editor without going through me.

EARED GREBE: One was still present at the Goldsboro, NC, Wastewater Treatment Plant (WTP) as late as May 1 (Eric Dean).

HORNED GREBE: One was slightly late at the Savannah Spoil Site, Jasper County, SC, May 7 (Steve Calver).

FEA'S PETREL: This species has almost become regular off North Carolina the last couple of years. This spring one was found off Oregon Inlet May 28, and one was off Hatteras May 31 (Brian Patteson *et al.*).

HERALD (TRINIDADE) PETREL: This species has become regular and expected off North Carolina. This season's birds included one-to-two dark phase off Oregon Inlet May 22, one dark phase off Oregon Inlet May 23, one

intermediate phase off Hatteras May 29, and two (one dark and one light phase) off Hatteras May 31; all noted by Brian Patteson et al.

BLACK-CAPPED PETREL: One was a good find off Murrells Inlet, SC, May 23 (Jack Peachey). This species is hard to find in South Carolina waters due to the distance to the Gulf Stream offshore.

SOOTY SHEARWATER: One seen from shore at Huntington Beach State Park, SC, April 10 (Tim Lewis and Lori Unruh) was not only rare but also very early.

MANX SHEARWATER: The only one found this spring was off Hatteras, NC, May 31 (Brian Patteson *et al.*).

LEACH'S STORM-PETREL: Good counts offshore included 44 off Oregon Inlet, NC, (Harry LeGrand, Paul Guris, *et al.*) and 41 off Hatteras, NC, (Brian Patteson *et al.*), both May 31.

WHITE-TAILED TROPICBIRD: Only one was found this spring, off Oregon Inlet, NC, May 28 (Brian Patteson *et al.*).

AMERICAN WHITE PELICAN: Always noteworthy in the Carolinas, two were near Oriental, NC, March 8-9 (*fide* Susan Campbell); and three were seen circling over Huntington Beach State Park, SC, April 17 (Jack Peachey and Gary Phillips).

DOUBLE-CRESTED CORMORANT: One seen in the Gulf Stream off Morehead City, NC, May 26 was quite unusual that far from land (Jeff Pippen). **ANHINGA:** In North Carolina this species was present at several inland locations this spring. Good counts included up to twelve along the Neuse River, Johnston County, May 3 (*fide* Susan Campbell), eight at Cottonade Lake, Cumberland County, April 11 (Phil Crutchfield), and six along the Neuse River, Wayne County, May 7 (Eric Dean). Other reports involved two at Overhills Lake, Harnett County, April 2 (Alan Schultz) and two along Contentnea Creek, Pitt County, on the early date of March 10 (Jack Fennell, *fide* John Fussell).

AMERICAN BITTERN: This species can be hard to find inland. Thus, of note were one at Chicod Creek, Pitt County, NC, May 9 (Brad Carlson and Jeff Lewis), and one at Mason Farm, Chapel Hill, NC, May 11 (Haven Wiley). One near Mason's Crossing, Scotland County, NC, May 28 was quite late (Barbara Gearhart).

GREAT EGRET: Some good upstate reports of this species included one in Oconee County, SC, May 8 (Steve Wagner) and one at Mills River, Henderson County, NC, May 17 (Wayne Forsythe and Ron Selvey).

SNOWY EGRET: Good inland spring occurrences included one at Jordan Lake, NC, May 9 (*fide* Barbara Roth) and one at L. Wheeler, Wake County, NC, May 16 (Ricky Davis).

LITTLE BLUE HERON: This species was found inland this spring in better-than-average numbers. One was early at Gray's Creek, Cumberland County, NC, March 15 (Phil Crutchfield), one was at the Little Creek Impoundment, Chapel Hill, NC, April 25 (Rob Gluck), one was quite unusual at Jackson Park, Hendersonville, NC, April 28 (Wayne Forsythe and Rick Hensley), three were on the Jordan Lake, NC, Spring Count May 9 (Ginger Travis, Dough Shadwick *et al.*), two were in Aiken County, SC, May 8 (Anne Waters), and one was late in eastern Johnston County, NC, May 29 (Eric Dean).

TRICOLORED HERON: One of the less common inland spring waders, Tricoloreds were found on the Durham, NC, Spring Count, April 25 (*fide* Mike Schultz) and the Chapel Hill, NC, Spring Count, May 2 (*fide* Will Cook).

REDDISH EGRET: Normally quite rare in spring in the Carolinas, this species was found several times. A dark phase was found at the Ft. Fisher, NC, spit April 3 (Chris Eley and Gordon Brown); a very rare white phase bird was at Litchfield Beach, SC, May 9-11 (Bob & Barbara Maxwell, Jack Peachey, Phil & Sharon Turner); and a dark phase adult was a complete surprise at C. Hatteras, NC, May 29 when it flew in off the ocean (Ricky Davis). One wonders where that bird came from, since we normally assume this species travels along the immediate coast.

CATTLE EGRET: Three were quite early inland at Gray's Creek, Cumberland County, NC, March 18, as noted by Phil Crutchfield.

BLACK-CROWNED NIGHT-HERON: Inland reports included one adult at Cottonade Lake, Cumberland County, NC, during March (Phil & Jim Crutchfield) and an adult near Laurinburg, NC, April 28 (Barbara Gearhart).

YELLOW-CROWNED NIGHT-HERON: Locally unusual and early were one along the Mashoes Road, Dare County, NC, March 29 (Jeff Lewis) and one at Jackson Park, Hendersonville, NC, April 2 (Wayne Forsythe, Rick Hensley, Ron Selvey). Also of note was one at Mason Farm, Chapel Hill, NC, April 27 (Haven Wiley).

WOOD STORK: An excellent count for such an early date was the 57 at the Santee Delta, Georgetown County, SC, March 19 (Jack Peachey).

FULVOUS WHISTLING-DUCK: Two found at Loris, SC, April 3 (Lois & Ernest Snavely) were not only locally unusual but were seen perched in a tree, a behavior rarely reported in the Carolinas. Also of note was one at the Savannah Spoil Site, SC, May 7-25 (Steve Calver).

LESSER SCAUP: Lingering Lessers included one at the Conway, SC, Sewage Ponds May 20 (Jack Peachey) and one at Bodie Island, NC, Lighthouse Pond May 28 (Ricky Davis *et al.*).

BLACK SCOTER: Late individuals were found at the Savannah Spoil Site, SC, May 18 (Steve Calver) and at Sunset Beach, NC, May 29 (Barbara Gearhart).

OLDSQUAW: Two at Ft. Fisher, NC, March 28 (Barbara Gearhart) and April 3 (Chris Eley and Gordon Brown) provided uncommon spring occurrences.

BUFFLEHEAD: A female was late at Roanoke Rapids Lake, NC, May 22, as noted by Ricky Davis.

RED-BREASTED MERGANSER: Two in the Pee Dee National Wildlife Refuge, NC, May 31 were observed to be unable to fly (Haven Wiley).

SWALLOW-TAILED KITE: Some of the more interesting spring reports included one early at Myrtle Beach, SC, March 20 (Sharon Turner), two along US 17 in Brunswick County, NC, in early May (Dan Lebbin), one near Florence, SC, May 14 (Steve Patterson), and one at Buxton, NC, May 6 (Marcia Lyons) and May 22 (Eric Dean, Bert Fisher, Leto Copeley). Also of note was the finding of the northernmost known nest along the Pee Dee River in Horry County, SC, in early May (John Cely, Lex Glover, Myia Whitehead). MISSISSIPPI KITE: This species continues to increase in the Carolinas. This spring several excellent counts were received. Over 100 were seen at Cowden

Plantation, Jackson, SC, May 20 (Steve Wagner), 40 were near Columbia, SC, May 29 (Doug DeNeve and Pam Burke), over 30 were near Enfield, Halifax County, NC, May 27 (Gene Howe and Jerry Moore), and 16 were in eastern Johnston County, NC, May 29 (Eric Dean). Other good sightings included two near Margaret, in eastern Franklin County, NC, May 26 (Ricky Davis), one at Pea Island, NC, May 28 (Ricky Davis and Pat Moore), and one at Merchant's Millpond State Park, NC, May 31 (Merrill Lynch).

SHARP-SHINNED HAWK: One at Bluff Mt., Ashe County, NC, May 1 (Merrill Lynch) was an interesting find.

COOPER'S HAWK: Nesting of this species is always noteworthy in the Carolinas. This spring a pair successfully fledged three young at Winston-Salem, NC, in May (Ramona Snavely). Also a pair were observed courting in the northern Asheville, NC area April 20 (Len Pardue).

BROAD-WINGED HAWK: Rare coastal spring reports included singles north of Mt. Pleasant, SC, April 17 (Dennis Forsythe and Ken Hollings) and in the Green Swamp, Brunswick County, NC, May 30 (Jeff Pippen).

ROUGH-LEGGED HAWK: A light phase individual provided a rare spring occurrence in the Raleigh-Durham, NC, airport area March 5-17 (Derb Carter, Jim Bloor, Susan Campbell). Amazingly, another or the same was found about seven miles to the east at Raleigh, also on March 17, as noted by Steve McManus!

GOLDEN EAGLE: Always noteworthy, Goldens were found near L. Toxaway, NC, March 15 (*fide* Norma Siebenheller) and near Avon, NC, on the absurdly late date of May 27 (Steve Harrison, *fide* Keith Watson). Late spring records along the coast are practically unheard of in our area.

MERLIN: Good inland spring reports involved one in Transylvania County, NC, March 26 (*fide* Norma Siebenheller) and one at Siler City, NC, May 16 (Harry LeGrand).

BLACK RAIL: The marshes in the Wanchese, Roanoke Island, NC, area have long been known to have good numbers of this species. Nevertheless, a count of at least ten different calling birds on the night of May 27 must have been impressive (Paul Guris).

VIRGINIA RAIL: Locally unusual were one along US 64 in eastern Edgecombe County, NC, March 13 (Ricky Davis) and one in Transylvania County, NC, March 25 (Dick Blee).

PURPLE GALLINULE: This species turned up in several unexpected places this spring. Very rare for the mountains, one was videotaped in a marsh in the Mills River, Henderson County, NC, area May 14-17 (Simon Thompson, Marilyn Westphal, Larry Farer, Wayne Forsythe). Coastally, one was found on the beach south of Drum Inlet on Core Banks, NC, May 10 (Jeff Cordes, *fide* John Fussell), one was found dead along the road at Bodie Island, NC, May 14 (Keith Watson), and one was discovered at a golf course pond at Caswell Beach, NC, May 30 (Jeff Pippen *et al.*).

SANDHILL CRANE: The young crane hanging around a hunt club in Marion County, SC, from the fall season was still present as of late May (*fide* John Gerwin). Also, a flock of 12 cranes was present in the Sealevel, Carteret County, NC, area from early May until the end of the month (*fide* John Fussell).

AMERICAN GOLDEN-PLOVER: Normally very rare in the Carolinas in spring, this species was found several times. An impressive group of eight was at Hooper Lane, Henderson County, NC, March 21, with five still there March 27 (Wayne Forsythe *et al.*). At the Savannah Spoil Site, SC, one was present March 30 (Paul Sykes and Steve Calver) and two were there April 29 (Calver). Also quite unusual was one at Woodlake, Moore County, NC, May 8 (Barbara Gearhart).

SEMIPALMATED PLOVER: The best inland counts involved the 30+ at Hooper Lane, NC, May 6 (Wayne Forsythe and Ron Selvey), 10 near Margaret, Franklin County, NC, May 21 (Ricky Davis), and eight near Pisgah Forest, Transylvania County, NC, May 6 (Carolyn & Rick Mills).

BLACK-NECKED STILT: One was slightly early at the Santee Coastal Reserve, SC, March 7 (Jack Peachey). Also, 24 at Eagle Island near Wilmington, NC, May 23 (Greg Massey) was a locally good count.

AMERICAN AVOCET: One at Eagle Island, Wilmington, NC, May 23 was locally unusual (Greg Massey).

UPLAND SANDPIPER: The best count reported was the eight at the Orangeburg, SC, Sod Farm April 17 (Tim Kalbach). Also of note were several late Uppies, including two at Hooper Lane, NC, May 1 (Wayne Forsythe) and one at Brevard, NC, May 10 (Betty McIlwain).

WHIMBREL: This species is a very rare spring transient inland, so three seen near Margaret, Franklin County, NC, May 19 (Ricky Davis) were a complete surprise.

SANDERLING: Good inland reports included one at Hooper Lane, NC, May 1 (Wayne Forsythe), one at Woodlake, Moore County, NC, May 2 (*fide* Susan Campbell), and one near Margaret, Franklin County, NC, May 18 (Ricky Davis).

SEMIPALMATED SANDPIPER: The best inland totals included 30+ at Hooper Lane, NC, May 6 (Wayne Forsythe and Ron Selvey), 12+ at Pisgah Forest, NC, May 6 (Carolyn & Rick Mills), and 10 near Margaret, Franklin County, NC, May 26 (Ricky Davis).

WESTERN SANDPIPER: Inland spring reports involved nine at Gray's Creek, Cumberland County, NC, March 18 (Phil Crutchfield), one at Hooper Lane, NC, May 6-7 (Wayne Forsythe and Ron Selvey), and two near Margaret, Franklin County, NC, May 26 (Ricky Davis).

WHITE-RUMPED SANDPIPER: Inland reports included two at Woodlake, Moore County, NC, May 8 (Barbara Gearhart); and several near Margaret, Franklin County, NC, May 18-26, with a peak of 11 on May 25 (Ricky Davis). **PECTORAL SANDPIPER:** The best inland totals came from Hooper Lane, NC, where a peak of 30 was had there March 20 (Wayne Forsythe *et al.*).

PURPLE SANDPIPER: Three at Huntington Beach State Park, SC, May 12 were very late (Jack Peachey and Paul Rogers), but one still there May 29 was unprecedented in its tardiness (Steve Roff, *fide* Jack Peachey).

DUNLIN: Spring inland Dunlin included seven at Gray's Creek, Cumberland County, NC, March 18 (Phil Crutchfield), three at Margaret, Franklin County, NC, May 21 (Ricky Davis), and three at Hooper Lane, NC, May 6 (Wayne Forsythe and Ron Selvey).

STILT SANDPIPER: Always noteworthy inland in spring, three were at Hooper Lane, NC, May 7, as noted by Wayne Forsythe and Ira Weigley.

SHORT-BILLED DOWITCHER: Interesting mountain area sightings included two at Ecusta, Transylvania County, NC, May 7 (Bill & Norma Siebenheller) and one at Hooper Lane, NC, May 7 (Wayne Forsythe and Ira Weigley).

WILSON'S PHALAROPE: The only ones reported were two at the Savannah Spoil Site, SC, May 25 (Steve Calver).

RED PHALAROPE: One at the salt pond at C. Hatteras, NC, March 27 provided a very rare onshore sighting (Brian Patteson).

SOUTH POLAR SKUA: Only one was found during this spring's string of pelagic trips from North Carolina, that being off Hatteras May 31 (Brian Patteson *et al.*).

LONG-TAILED JAEGER: Always exciting, two were found off Hatteras, NC, May 31 (Brian Patteson *et al.*).

LAUGHING GULL: One was a good local find at L. Murray, SC, May 9 (Lex Glover and David Dobson). Also quite rare for the mountains, one was at Brevard, NC, April 15, and amazingly the same or another was seen about eight miles away later in the day at Rosman, NC, (Betty McIlwain).

LITTLE GULL: The only one reported was an adult at C. Hatteras, NC, March 13, as noted by Marcia Lyons.

BONAPARTE'S GULL: Two were slightly late at Jordan Lake, NC, May 15-16 (Will Cook *et al.*, Ricky Davis), but ten at the Savannah Spoil Site, SC, May 25 were very late (Steve Calver)!

HERRING GULL: One was locally unusual at Rosman, NC, April 15 (Bill & Norma Siebenheller, Betty McIlwain).

LESSER BLACK-BACKED GULL: Locally unusual in spring were an adult at Ft. Fisher, NC, April 3 (Chris Eley and Gordon Brown) and a first-winter bird at the Jacksonville, NC, WTP April 15 (John Fussell). Also a second-year bird was late at C. Hatteras, NC, May 29 (Ricky Davis and Chris Eley).

GLAUCOUS GULL: Locally rare was a first-winter individual at the Jacksonville, NC, WTP March 24 (Jim O'Donnell). Also, one remained very late at C. Hatteras, NC, until at least May 6 (Marcia Lyons).

BLACK-LEGGED KITTIWAKE: A sub-adult kittiwake was found on the Oregon Inlet, NC, flats on the absurdly late date of May 22 (John & Paula Wright).

ARCTIC TERN: Small numbers were found offshore this spring. The highest one-day total was only four off Hatteras May 30 (Harry LeGrand, Paul Guris, *et al.*).

RAZORBILL: One was found dead on the beach at Ft. Macon, NC, April 6 (Randall Newman, *fide* John Fussell), providing a rare April record for the species.

EURASIAN COLLARED-DOVE: One found in the Conover, NC, area April 21 (Dwayne & Lori Martin) provided one of the farthest inland reports yet of this invading species.

WHITE-WINGED DOVE: This species is being found in the Carolinas with increasing frequency. Sightings of note this spring included one at Rodanthe, NC, May 8 (Chris Eley and Gordon Brown) and one at Buxton, NC, May 28

(fide Taylor Piephoff). Also, the birds present for some time at Beaufort, NC, were paired up May 28, as noted by John Fussell and Susan Arrington.

MOURNING DOVE: Two seen at Carver's Gap, Roan Mountain, NC, May 28 were considered to be at an unusually high elevation (5500') for the species (Rick Knight).

COMMON GROUND-DOVE: One was a complete surprise at Falls Lake, NC, May 3 (Tom Howard). Although known to wander inland rarely, this was quite far away from the coast for that state.

BLACK-BILLED CUCKOO: Always noteworthy, sightings of this cuckoo included three at Jackson Park, NC, May 19 (Wayne Forsythe *et al.*), one along the Blue Ridge Parkway in Transylvania County, NC, May 22 (Simon Thompson *et al.*), one at the Congaree Swamp Nat. Mon., SC, May 11 (Simon Thompson *et al.*), and one early at Mason Farm, Chapel Hill, NC, April 26 (Haven Wiley).

WHIP-POOR-WILL: This species continues to spread toward the coast during the breeding season. An impressive count of 54 calling Whips was had along 15 miles of road in the Croatan Nat. For., NC, May 4 (John Fussell), showing that their numbers are increasing in the east also.

RED-HEADED WOODPECKER: One aduit was found on the north end of Roanoke Island, NC, May 6 for a locally unusual report (Jeff Lewis).

OLIVE-SIDED FLYCATCHER: This rare species was reported only three times: at Table Rock Mt., SC, May 4 (Scott Stegenga), at Mason Farm, Chapel Hill, NC, May 9 (Haven Wiley), and at Winston-Salem, NC, May 24 (*fide* Ramona Snavely).

YELLOW-BELLIED FLYCATCHER: One was an excellent find at Mason Farm, Chapel Hill, NC, May 16, as noted by Haven Wiley. This is a very rarely found spring transient in the Carolinas.

EASTERN KINGBIRD: Slightly early migrants were found at the Green Swamp, Brunswick County, NC, April 3 (Harry LeGrand and Jeff Pippen) and in eastern Edgecombe County, NC, April 4 (Ricky Davis).

GRAY KINGBIRD: This spring's sightings included singles at Cape Hatteras, NC, May 20 (Keith Blachmore *et al.*) and Cedar Island, NC, May 29, at the ferry terminal (John Fussell, Susan Arrington, Jim & Laura O'Donnell).

SCISSOR-TAILED FLYCATCHER: This species was once again found, thereby extending the string of seasonal occurrences. Adults were found in Greenville, SC, April 24 (Pete Worthington) and near Townville, SC, May 4 (Roger Smith).

BLUE-HEADED VIREO: A late migrant at Pea Island, NC, May 28 (Jeff Lewis) was determined to be of the "alticola" race, a most unusual sighting for the date and location. Good easterly breeding records included a pair building a nest at Weymouth Woods Preserve, Southern Pines, NC, in early April (Scott Hartley, Chris Helms, Susan Campbell) and one singing on territory near Ringwood, Halifax County, NC, May 31 (Merrill Lynch).

WARBLING VIREO: A rare spring migrant was seen and heard in western Orange County, NC, April 29 (Doug Shadwick). Even rarer was one found at the coast in Georgetown County, SC, May 8 (Jack Peachey, Charlie Heacock, Paul Rogers).

PHILADELPHIA VIREO: Always exciting in spring, rare migrant Philadelphias were found at Mason Farm, Chapel Hill, NC, May 2 (Joanna Von Drasek, *fide* Haven Wiley and Jeff Pippen) and at Saluda Shoals Park, Lexington County, SC, May 9 (Robin Carter and Caroline Eastman).

CLIFF SWALLOW: Probable late spring transients included four at Cape Lookout, NC, May 25 (John Fussell, Ray Winstead, Wayne Irvin) and three at Pea Island, NC, May 28 (Ricky Davis).

BROWN CREEPER: Always a good find during the breeding season, a pair was on territory at the rather low elevation of 3300' at Buck Creek Barrens, Clay County, NC, May 9, as noted by Harry LeGrand and Derb Carter.

WINTER WREN: One on Roanoke Island, NC, May 6 was quite late, especially for that coastal locality (Jeff Lewis).

SEDGE WREN: Good inland finds included singles at Mason Farm, Chapel Hill, NC, May 2 (Haven Wiley), Robbinsville, NC, May 6 (Simon Thompson *et al.*), and Oconee County, SC, May 8 (Steve Wagner).

MARSH WREN: One near Laurinburg, NC, May 3 (Barbara Gearhart) provided a locally uncommon sighting.

VEERY: One at Cape Lookout, NC, May 25 (John Fussell, Ray Winstead, Wayne Irvin) was quite late for that coastal site.

"BREWSTER'S" WARBLER: This hybrid warbler was reported twice with birds being found near Chapel Hill, NC, May 2 (Kent Fiala) and at Reedy Creek Park, Mecklenburg County, NC, May 3 (Taylor Piephoff).

TENNESSEE WARBLER: One was a locally rare spring transient at Laurinburg, NC, May 9 (Barbara Gearhart).

NASHVILLE WARBLER: Very rare spring migrants were noted in Wake County, NC, May 4 (Clyde Sorensen) and at Roanoke Island, NC, May 6 (Jeff Lewis). Also, one found in a yard at Myrtle Beach, SC, March 19 was probably a locally wintering individual instead of an early migrant (Sharon & Phil Turner, Ann Wilson).

MAGNOLIA WARBLER: One apparently singing on territory was found along the Blue Ridge Parkway at Beacon Heights, Avery County, NC, May 22 (Harry LeGrand and Jeff Pippen). Any potential breeding activity observed in this species in the Carolinas should be reported, as this is the southern limit of their nesting range.

BLACKBURNIAN WARBLER: Three different individuals found during May on Roanoke Island, NC, indicated a strong easterly migration for the species (Jeff Lewis).

KIRTLAND'S WARBLER: A large, tail-wagging warbler, observed near Zebulon, NC, April 28 (Eloise Potter), had a gray back and rump (no yellow). Although the bird was seen briefly, it was heard singing clearly and at close range. The observer also heard some Kirtland's on the breeding grounds several weeks later, thus confirming the identity of this extremely rare migrant. Coupled with one or two spring mountain reports several years ago, it seems possible that future sightings of this endangered species might be made as its population continues to slowly increase.

CERULEAN WARBLER: In a survey of the Roanoke River, NC, population in late May, Merrill Lynch found Cerulean numbers to be way down, with only

seven singing birds tallied. We hope that this alarming development is just a temporary one.

AMERICAN REDSTART: Merrill Lynch counted an impressive 45 singing birds along the Roanoke River May 26, impressive numbers for this area on the eastern edge of the breeding range. Also two territorial pairs near Sharon, York County, SC, May 30 (Lex Glover) were noteworthy for that eastern locality.

OVENBIRD: In Dare County, NC, Ovenbirds found at Nags Head Woods March 12 (Keith Watson) and Alligator River NWR March 18 (Jeff Lewis) were probably rare wintering birds, not early migrants.

LOUISIANA WATERTHRUSH: An impressive count of 12 was had in the Green Swamp, Brunswick County, NC, May 8 (Greg Massey), indicating higher than normal numbers for this coastal plain locality.

CONNECTICUT WARBLER: Always exciting in the Carolinas, one was at Jackson Park, NC, May 8 (Wayne Forsythe *et al.*) and one was in the Moses Cone area of the Blue Ridge Parkway, NC, May 22 (Jeff Pippen and Harry LeGrand).

MOURNING WARBLER: Reports of this rare transient included a female along the Broad River, Columbia, SC, May 13 (Merle Nisly, *fide* Chris Newkirk), a female at Mason Farm, Chapel Hill, NC, May 21 (Haven Wiley), and two different males at Jackson Park, NC, May 14 (Wayne Forsythe) and May 17 (Harvey Neal and Wayne Forsythe).

WILSON'S WARBLER: Very rare near the coast was one in the Green Swamp, Brunswick County, NC, May 8, as noted by Greg Massey.

CANADA WARBLER: One was a locally good find on Roanoke Island, NC, May 20 (Jeff Lewis).

SCARLET TANAGER: One was very far to the east in Gates County, May 31 (Merrill Lynch). Lynch also had an exceptional total of 12 singing Scarlets along the Roanoke River, NC, May 26-27, indicating increased numbers on the edge of the breeding range.

CLAY-COLORED SPARROW: One was a locally very rare find in Henderson County, NC, April 27 (Wayne Forsythe) and provided one of the very few spring reports of the species for the Carolinas.

HENSLOW'S SPARROW: One found in the Green Swamp, Brunswick County, NC, April 3 (Harry LeGrand, Jeff Pippen, Derb Carter), was possibly a locally wintering bird.

NELSON'S SHARP-TAILED SPARROW: One netted at Charleston, SC, May 31 provided a new late date for the species in that state (Will Post).

FOX SPARROW: Quite late were one at Mason Farm, Chapel Hill, NC, May 7 (Haven Wiley) and five in Cumberland County, NC, May 8 (Phil Crutchfield). This species normally leaves the state in late March or early April. LINCOLN'S SPARROW: More than the usual number of spring sightings were reported this year. Some of the more interesting reports included one in the Pink Beds area, Transylvania County, NC, April 14 (Tom Joyce), one in Congaree Swamp Nat. Mon., SC, April 21 (Jerry Griggs), one at Raleigh, NC, May 1 (Kent Fiala), one in Mecklenburg County, NC, May 3 (Taylor Piephoff), and one in a Raleigh, NC, yard May 9 (Gail & Herman Lankford). These three May records are quite interesting, since this species is very rarely reported after mid-April.

"LATE" SPARROWS: Other tardy sparrows included a Swamp found in Union County, SC, May 22 (Lex Glover), a White-crowned at Mason Farm, Chapel Hill, NC, May 18 (Jeremy Hyman), and a White-throated on Roanoke Island, NC, May 20 (Jeff Lewis).

LAPLAND LONGSPUR: The only reports received involved one near Scotland Neck, NC, March 13 (Ricky Davis) and four at Hooper Lane, NC, March 21 (Marilyn Westphal, *fide* Wayne Forsythe).

DICKCISSEL: There were widespread reports of this species again this spring. Some of the more interesting sightings included at least three at Hooper Lane, NC, from late April to early May (Wayne Forsythe *et al.*), three near Townville, SC, May 4-10 (Roger Smith, Jack & Dorothy Hudson), one at Kure Beach, NC, May 2 (Mark Galizio), one near Columbia, SC, April 26 (Robin Carter and Caroline Eastman), one in Bladen County, NC, May 13 (Clyde Sorensen), and one at Cape Hatteras, NC, May 22 (Eric Dean, Bert Fisher, Leto Copeley).

YELLOW-HEADED BLACKBIRD: The only one found this spring was an immature male on Harbor Island, SC, May 8-9 (Judy Halleron).

SHINY COWBIRD: This invading species was found twice: in Fayetteville, NC, May 8 (*fide* Phil Crutchfield) and on Harbor Island, SC, in late May (Judy Halleron).

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CBC members receive The Chat, a quarterly journal devoted to bird study and conservation, and the CBC Newsletter, which carries information about meetings, field trips, and club projects. Articles intended for publication in The Chat may be sent to the Editor or the appropriate editor listed in the inside front cover. Items for the Newsletter should be sent to its Editor, Clyde Smith, 2615 Wells Avenue, Raleigh, NC, 27608. Send correspondence regarding memberships, changes of address, or requests for back numbers of either publication to CBC Headquarters, 11 West Jones Street, Raleigh, NC 27601-1029.

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The Chat

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